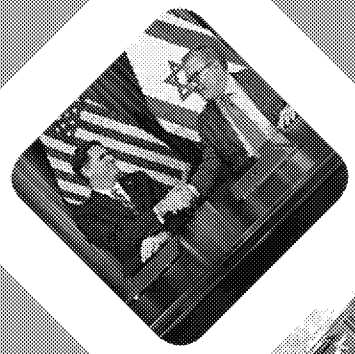
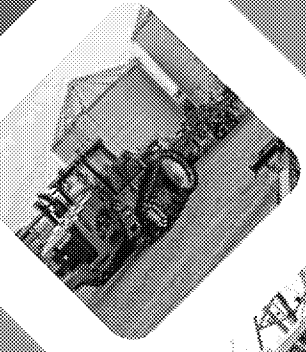
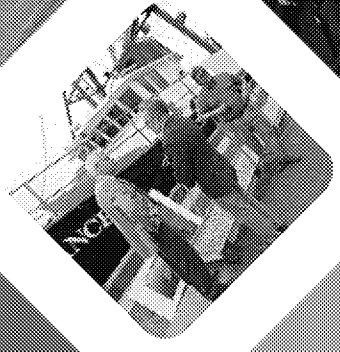
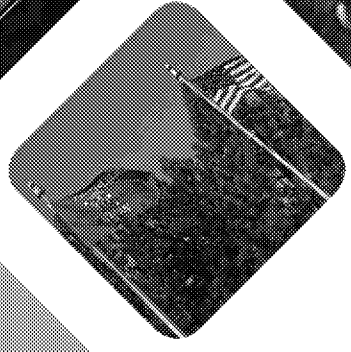





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# YEAR IN REVIEW 2018

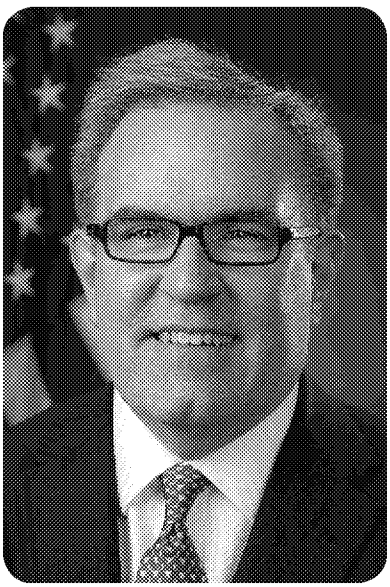
# ACCOMPLISHMENTS

- **Issued Major Proposals Including the Affordable Clean Energy Rule, the SAFE Vehicles Rule, and the New Waters of the U.S. Definition**
- **Provided Greater Regulatory Certainty to States, Tribes, Localities, and the Regulated Community**
- **Streamlined the Effectiveness and Efficiency of EPA**
- **Launched Cross-Agency Initiatives to Improve Risk Communication on Emerging Contaminants and Vulnerable Populations**
- **Initiated Multiple Actions to Reduce Lead Exposure, Including Releasing the Federal Lead Action Plan**
- **Improved Enforcement Compliance and Assistance**
- **Held the Agency's First-Ever PFAS National Leadership Summit and Inaugural Recycling Day Summit**
- **Led International Environmental Efforts, Including First-Ever Articles to Prevent and Reduce Marine Litter**
- **Ensured Comprehensive and Coordinated Responses to Multiple Natural Disasters**

## BY THE NUMBERS:

- **REGULATORY REFORM:** 13 deregulatory actions were finalized in 2018. To date, under President Trump, EPA has finalized 33 major deregulatory actions saving Americans almost $2 billion.
- **AIR:** EPA reported that, during President Trump's first year in office, greenhouse gas emissions from major industrial sources decreased by 2.7 percent.
- **WATER:** By the end of 2018, EPA closed seven WIFIA loans totaling nearly $2 billion to help finance over $4 billion for water infrastructure projects and create up to 6,000 jobs.
- **LAND:** EPA deleted all or part of 22 sites from Superfund's National Priorities List in FY 2018 – the largest number of deletions in one year since FY 2005.
- **CHEMICALS:** After inheriting a "backlog" of 672 new chemical submissions pending review in January 2017, under President Trump, EPA aggressively worked to improve the review of new chemical submissions and, as a result, eliminated the initial backlog and reduced the number of cases pending review to 475 submissions by August 2018. EPA completed 99.7 percent of the 2,199 pesticide registration actions on-time, registered 23 new active ingredients and 147 new uses of existing pesticides, providing new tools to growers to meet their pest management needs.
- **ENFORCEMENT:** In FY 2018, EPA enforcement actions required the treatment, disposal, or elimination of 809 million pounds of pollutants and waste - almost twice as much as FY 2017. The Agency also entered into the largest settlement in the history of EPA's enforcement of the Risk Management Program with the responsible party spending $150 million on major safety improvements.
- **GRANTS:** EPA awarded $4,451,520,905 in grants in FY 2018 including more than $63 million under the General Assistance Program, benefiting nearly all federally recognized tribes through awards to 500 tribal governments and approximately 25 intertribal consortia, $4.344 million in State and Tribal Assistance Grants, and 37 environmental education grants totaling $3,306,760 in 32 states to 13 colleges and universities, 23 stakeholder organizations, and one tribal community.

# INTRODUCTION:
# EPA ACTING ADMINISTRATOR ANDREW WHEELER



Over the past year, the Trump Administration has continued to deliver on its promises to the American public. Not only are the economic prospects of Americans brighter and improving by the day, but so are environmental and public health conditions. Under President Trump, America is on a path to a stronger, safer, and cleaner future. This report highlights key steps we have taken to achieve this goal and to protect the environment and public health.

In 2018, we have been particularly focused on providing greater certainty to the American public: certainty in our EPA programs; certainty to the states, tribes, and local governments; and certainty on how we communicate risk. The American public have a right to know the truth about the risks they face in their daily lives and how we are responding. It is our responsibility to explain it to them clearly and consistently.

The reality is that low-income, minority, or disadvantaged Americans are those most often impacted by environmental hazards or most likely to live near contaminated lands. It is these Americans that we are most focused on. I am especially proud to report that, in FY 2018, EPA deleted all or part of 22 sites from Superfund's National Priorities List, the largest number of deletions in one year since FY 2005. By cleaning up these toxic sites, we are returning the land to productive use and improving the lives of nearby residents.

In the same vein, we are taking multiple steps to protect our children from the dangers of lead exposure, such as collaborating with our federal partners to release the new Federal Lead Action Plan, proposing stronger dust-lead hazard standards, working to update the lead and copper rule for the first time in two decades, and using our financing and grant programs to upgrade water infrastructure. We also launched common-sense reforms to reduce air pollution, such as the Cleaner Trucks Initiative, and we held two historic events: the Agency's first-ever PFAS National Leadership Summit and the inaugural Recycling Day Summit.

On top of this, we continue to deliver on President Trump's regulatory reform agenda. In 2018, we finalized 13 major deregulatory actions, saving Americans almost $2 billion in regulatory costs. We announced an additional 49 deregulatory actions that are in development, and we issued three major regulatory proposals: the Affordable Clean Energy rule, the Safer Affordable Fuel Efficient Vehicles rule, and our new waters of the U.S. definition. Together, these actions will provide states and the regulated community the certainty they need to invest in new technologies that can improve both the economy and the environment.

Internally, we've made great strides to make EPA more efficient and effective. Shortly after becoming Acting Administrator, I held an Agency-wide all-hands address. I promised to listen to and work closely with all EPA employees as we work to improve how we carry out our responsibilities. To uphold that commitment, I visited all ten of our regional offices and held a question and answer session at each office. The insights I gleaned from EPA staff during those visits greatly informed our accomplishments. One such example is our regional realignment, which will dramatically improve our interactions with states and the regulated community.

We are proud of the progress we've made in 2018, and I know that none of it would be possible without our talented and dedicated EPA staff. More work remains to be done, but I'm confident that we will continue to improve how we carry out our vital task of protecting human health and the environment for all Americans.

# YEAR in REVIEW

# TABLE of CONTENTS

# REGULATORY REFORM

Under President Trump, EPA has made tremendous progress reducing unnecessary regulatory burdens. In the last year, EPA finalized 13 major deregulatory actions – a rate of at least one rule a month. The Agency nearly doubled its cost-savings goals for the year and easily met the 2-for-1 requirement per President Trump's Executive Order 13771. Since President Trump took office, EPA has finalized 33 major deregulatory actions, saving Americans almost $2 billion in regulatory costs.

For FY 2019, EPA proposed a regulatory budget that anticipates saving a total of $818 million in regulatory costs. Additionally, the Fall 2018 Regulatory Agenda included 45 actions that are expected to be deregulatory – 34 of those actions appeared for the first time.

**"Thanks to President Trump's leadership, we are providing states and the regulated community the certainty they need to advance new technologies, improve environmental protections, and enhance economic growth."**

**– EPA Acting Administrator Andrew Wheeler**

# AIR: Improving Air Quality

### Air Trends

Data released over the past year of the Trump Administration shows tremendous progress on the improvement of air quality and a decrease in greenhouse gas (GHG) emissions. EPA's most recent report highlights that, between 1970 and 2017, the combined emissions of six key pollutants dropped by 73 percent, while the U.S. economy grew more than three times.

A closer look at more recent progress shows that between 1990 and 2017, average concentrations of harmful air pollutants decreased significantly across our nation:

- Sulfur dioxide (1-hour) ↓ 88 percent
- Lead (3-month average) ↓80 percent
- Carbon monoxide (8-hour) ↓ 77 percent
- Nitrogen dioxide (annual) ↓ 56 percent
- Fine Particulate Matter (24-hour) ↓ 40 percent
- Coarse Particulate Matter (24-hour) ↓ 34 percent
- Ground-level ozone (8-hour) ↓ 22 percent

2017 GHG data collected under the EPA's Greenhouse Gas Reporting Program showed overall decreases across sectors and that total U.S. GHG emissions reported decreased by 2.7 percent during 2017.

### Affordable Clean Energy Rule

In August 2018, EPA proposed the *Affordable Clean Energy (ACE) Rule* – a new rule to reduce GHG emissions from existing coal-fired electric utility generating units and power plants across the country. The ACE Rule replaced the prior administration's Clean Power Plan (CPP) that was indefinitely stayed by the Supreme Court in 2016. The ACE Rule will empower states, promote energy independence, and facilitate economic growth and job creation across the country.

**"The ACE Rule follows the Clean Air Act and empowers states to reduce greenhouse gas emissions and provide modern, reliable, and affordable energy for all Americans. Our proposal provides the states and regulated community the certainty they need to continue environmental progress while fulfilling President Trump's goal of energy dominance."**

**– EPA Acting Administrator Andrew Wheeler**

EPA estimates the ACE Rule could provide $400 million in annual net benefits and could reduce 2030 CO2 emissions by up to 1.5 percent from projected levels – the equivalent of taking 5.3 million cars off the road. Further, when states have fully implemented the proposal, U.S. power sector CO2 emissions could be 33 to 34 percent below 2005 levels, a greater reduction than the projected CO2 emissions reductions from the CPP, which was never implemented..

### Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

Together, EPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) released the proposed *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule* for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule) to correct the current national automobile fuel economy and greenhouse gas emissions standards. The proposal lays out eight options for national fuel economy standards for model years 2021-2026. Compared to keeping the 2012 standards in place, the Trump Administration's preferred option would reduce the cost of a new car by more than $2,300. These savings would help more Americans purchase newer, cleaner, and safer vehicles, thereby improving the environment and saving lives. It is anticipated to:

- Prevent thousands of on-road fatalities and injuries as compared to the standards set forth in the 2012 final rule.
- Increase vehicle affordability, which leads to increased driving of newer, safer, more efficient, and cleaner vehicles.
- Decrease overall average vehicle ownership costs for new vehicles, approximately $2,340.
- Reduce regulatory costs approximately $252.6 billion reduction through MY 2029.

## A Timeline of NSR REFORM

1. In January 2018, Assistant Administrator Wehrum issued a guidance memorandum withdrawing the 1995 "once-in-always-in" policy for classifying major sources of hazardous air pollutants (HAPs) under section 112 of the Clean Air Act, under which even sources that had curtailed HAP emissions entirely nevertheless remained subject for all time to the regulatory requirements (including recordkeeping and reporting for HAP emissions they no longer have) major sources of HAPs must meet. In that January 2018 guidance memorandum, EPA explained that the plain language of the statute allows major sources that no longer meet the statutory definition of "major source" to be reclassified at any time and no longer be subject to major source requirements. EPA is developing a proposed rule to implement this plain language reading. These steps by EPA will reduce unnecessary regulatory burdens that potentially discouraged sources from reducing or eliminating their HAP emissions and deter other innovative efforts to improve the environment.

2. In March 2018, EPA issued a guidance memorandum titled, "Project Emissions Accounting Under the New Source Review Preconstruction Permitting Program," providing EPA's interpretation of existing NSR regulations with respect to the accounting of emissions reductions from a project under Step 1 of the NSR applicability process. By clarifying the meaning of current regulatory requirements, the memo streamlines permitting without sacrificing environmental protections, and reduces burdens to develop and expand facilities while encouraging companies to reduce pollution.

3. In April 2018, EPA issued a guidance memorandum and supporting documents that recommended significant impact levels for ozone and fine particle pollution that may be used in the prevention of significant deterioration (PSD) permitting program. Permitting authorities may use the recommended values in the guidance to help determine whether a proposed PSD source or modification causes or contributes to a violation of the corresponding NAAQS or PSD increments.

## A Timeline of NSR REFORM

4. In August 2018, EPA proposed the Affordable Clean Energy rule which proposed revisions to the NSR program to establish a new applicability test for electricity generating units (EGU).
5. In November 2018, EPA finalized the 2009 project aggregation reconsideration action which lifted the stay on the application of EPA's 2009 interpretation on project aggregation.
6. In September and November 2018, EPA issued for public comment draft guidance memoranda addressing other issues of importance under the NSR program. Two key areas addressed include determining when two sources are sufficiently "adjacent" to one another that they should be considered a single source for purposes of permitting; and what sort of measures taken to bar the general public's access to land can permitting authorities take account of in determining what is, and isn't, "ambient air." EPA intends to finalize this guidance in the New Year after considering the input received.

### NSR Modernization

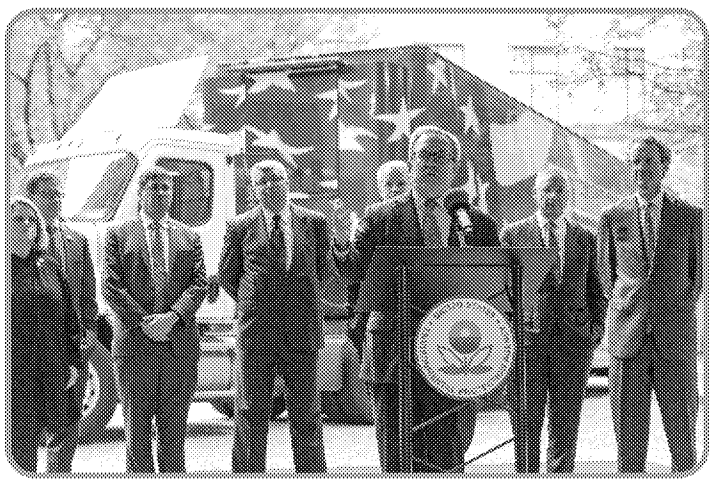
Previously, New Source Review (NSR) regularly discouraged companies from investing in and deploying the cleanest and most efficient technologies. Through the Trump Administration's NSR reforms, EPA is providing clarity to permitting requirements, improving the overall process, and incentivizing investments in the latest energy technologies. NSR reform is a key part of President Trump's agenda to revitalize American manufacturing and grow our economy while continuing to protect and improve the environment.

EPA intends to undertake a number of additional actions that will further modernize and streamline the NSR process, without impeding the Agency's ongoing efforts to maintain and enhance the nation's air quality. Work on those new actions is already underway and will continue throughout 2019.

### Cleaner Trucks Initiative

In November 2018, EPA launched the Cleaner Trucks Initiative (CTI) to further decrease nitrogen oxide (NOx) emissions from on-highway heavy-duty trucks and engines. CTI will include a future rulemaking that will update the existing NOx standard, which was last set in 2001, while also streamlining compliance and certification requirements.

It is estimated that heavy-duty trucks will be responsible for one-third of NOx emissions from the transportation sector in 2025. EPA expects that any update to the standards will result in significant mobile source NOx reductions, which will aid communities across the country in the attainment of ozone and particulate matter standards.



In addition to NOx emissions standards, the CTI will cut unnecessary red tape and simplify certification of compliance requirements for heavy-duty trucks and engines. Working together with partners in states and industry, the country can achieve environmental results through the pursuit of common-sense regulations that encourage economic growth. New programs borne out of the CTI offer opportunities to streamline regulations through smarter program design and reduce the overall regulatory burden while protecting human health and the environment.

### National Ambient Air Quality Standards

- *"Back-to-Basics" Memo:* In May, the Agency issued a memo outlining its approach to the National Ambient Air Quality Standards (NAAQS) review process. The "Back-to-Basics" process will ensure that EPA and its independent science advisors follow a transparent, timely, and efficient process in reviewing and revising public health- and welfare-based NAAQS. The reforms include incorporating important policy-relevant context, as required in the Clean Air Act, on issues like background pollution and potential adverse health, welfare, economic, energy, and social effects from strategies to attain and maintain the NAAQS. The memo states that EPA intends to finalize the next review of ozone by the

Clean Air Act deadline of October 2020. It also states that the Agency intends to complete its review of the particulate matter NAAQS by December 2020.

- *FIPS to SIPS:* In the second year of the Trump EPA, the Agency continued its monthly average of converting one Federal Implementation Plan (FIP) into a State Implementation Plan (SIP).

- *Ozone Standards:* The U.S. has experienced dramatic progress for ozone and other air pollutants. EPA completed area designations for the 2015 ozone standards and finalized its implementation and state plan requirements rule for the standards, which will facilitate flexible regulatory tools to address permitting requirements and international emissions in these areas. Compared to designations issued in 2012 for the 2008 standards, there are 10 percent fewer counties being designated "nonattainment" for the more stringent 2015 standard.

- *CSAPR Update:* Given the major progress states have made reducing ozone concentrations, the Agency determined that the 2016 Cross State Air Pollution Rule (CSAPR) Update satisfies "good neighbor" obligations for the 2008 NAAQS for ground-level ozone. The latest EPA air quality data and modeling predict that, by 2023, there will be no remaining nonattainment or maintenance areas for the 2008 Ozone NAAQS in the CSAPR Update region (which encompasses most of the eastern United States). Once the 2016 CSAPR Update is fully implemented, upwind states in this region are not expected to contribute significantly to nonattainment or interfere with the maintenance of the 2008 ozone standards in any downwind state. The rule determined that EPA and these 20 states have no obligation to establish additional requirements for sources to further reduce transported ozone pollution to satisfy "good neighbor" obligations under the 2008 ozone NAAQS.

## Renewable Fuel Standard

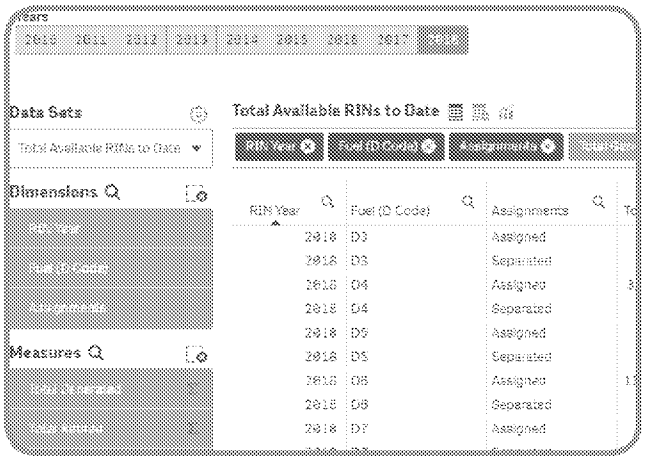
For the second year in a row, the Trump EPA finalized volume requirements for the Renewable Fuel Standard (RFS) by the congressionally mandated statutory deadline November 30 – an annual deadline that the previous administration consistently missed by hundreds of days. The timely finalization of RFS volumes for 2019 and biomass-based diesel for 2020 provides stability to the program and greater certainty to farming and refining communities across the country.

- *Year-Round E15:* President Trump has made strengthening the Renewable Fuel Standard an important priority of this administration. EPA is actively working to implement President Trump's directive on year-round E15 and proceeding as expeditiously as practicable. These actions will give America's farmers the regulatory certainty and clarity they asked for – and deserve. The Agency plans to release proposed rule text in February 2019 and take final action on the proposal by the upcoming driving season.

- *New Renewable Fuel Pathway:* EPA approved a variety of pathways for renewable fuel derived from sorghum, including biodiesel, heating oil, jet fuel, heating oil, and liquefied petroleum gas produced from sorghum oil, a by-product of ethanol produced from using grain sorghum as a primary feedstock. These pathways meet the greenhouse gas emissions reductions requirements to qualify to generate credits or Renewable Identification Numbers (RINs) for biomass-based diesel and advanced biofuels under the RFS program. This new feedstock is estimated to produce around 21 million gallons providing flexibility in meeting volume standards of the RFS program. It also adds diversity to the biofuel mix in the country.

**"More and more farmers are growing sorghum in Nebraska, and it's an important commodity in our state. EPA's approval of a sorghum oil fuel pathway under the RFS is good news for Nebraska ag producers and rural America. I look forward to continuing to work with the administration to provide opportunities for Nebraska farmers."**

**– Senator Deb Fischer (NE)**




- *Transparency:* In September, EPA updated the RFS program website to increase transparency surrounding the program. The updated website includes new data and information for both stakeholders and the public. The data provides important information for renewable fuel producers, fuel refiners, importers, and marketers that can be used as they make business and compliance decisions.

## Proposed Revisions to New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil-Fuel Fired Power Plants

Administrator Wheeler is joined by National Black Chamber of Commerce (NBCC) President & CEO Harry Alford, American Coalition for Clean Coal Electricity President & CEO Michelle Bloodworth and NBCC Executive Vice President Kay DeBow Alford

In December, EPA proposed to revise the New Source Performance Standards (NSPS) for greenhouse gas emissions from new, modified, and reconstructed fossil fuel-fired power plants. Under Section 111(b) of the Clean Air Act, the Agency proposed to revise its determination of the best system of emission reduction (BSER) for these plants. This proposed rule would ensure that any new coal plants built in the U.S. use the most advanced, clean coal technologies that have been adequately demonstrated. The revised standard is based on reality and comports with the requirements of the Clean Air Act. These proposed revisions would help to provide room for American energy production to continue to grow and diversify, which is critical for long-term energy security and global competitiveness goals.

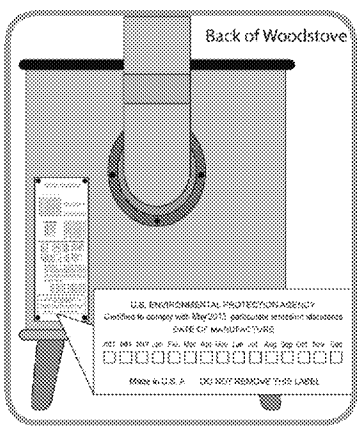
## Improving Regulations for Wood Heaters

EPA took key steps toward ensuring that the Agency's NSPS for new residential wood heaters are based on real-world conditions. The Agency's proposed amendments would provide relief for consumers, retailers, and manufacturers by allowing the sale of wood heaters that meet the latest emissions limits through May 2022. This action is expected to save approximately $33 million in regulatory costs from 2019 – 2022.

EPA's proposed amendments to the 2015 NSPS for Residential Wood Heaters provide consumers additional time to purchase already-manufactured wood-fired hydronic heaters and forced-air furnaces that meet the latest emissions limits before manufacturers are required to sell units that meet tighter limits due to take effect in 2020. The proposal would not change the effective date of the tighter emissions limits; however, it would allow retailers to "sell-through" or sell existing inventory of heaters meeting current emissions limits through May 2022.

**"Maine applauds the EPA's efforts to revise the 2015 Residential Wood Heater NSPS. We support the improvement of Step 2 wood heater emission standards to ensure they are based on reproducible testing methods using cord wood, which better represents real-life operations. This provides opportunity to establish the most appropriate emission standards for each residential wood heater technology based on representative data and sound scientific methods."**

**– Maine Department of Environmental Protection Air Quality Bureau Director Marc A. R. Cone P.E.**

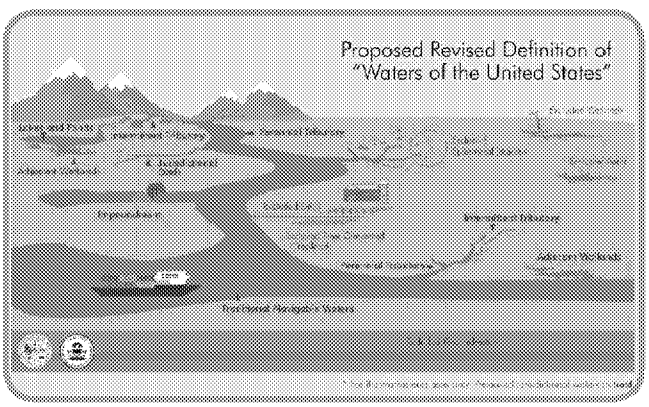


# WATER: Providing Clean & Safe Water

## Waters of the United States (WOTUS)

*Acting Administrator Wheeler and R.D. James, Assistant Secretary of the Army for Civil Works sign the WOTUS proposed definition at EPA Headquarters*

In December 2018, EPA and Department of the Army took a significant and historic step to provide certainty to farmers, landowners, and co-regulators across the country by proposing a revised definition for WOTUS. The proposal's clear and common-sense approach to identifying waters that are subject to federal regulation reflects the pre-proposal input the agencies solicited from a wide range of stakeholders. This proposal begins the second step in a two-step rulemaking process to review and revise the definition of "waters of the United States" consistent with President Trump's February 2017 Executive Order. EPA looks forward to reviewing the public's comments on the proposed new definition and taking final action on this proposal in 2019.




## Providing Safe Drinking Water

### *Addressing Per- and Polyfluoroalkyl Substances (PFAS)*

In May 2018, EPA convened a two-day National Leadership Summit on PFAS in Washington, D.C. that brought together more than 200 stakeholders from across the country to discuss steps to address PFAS. Following the Summit, the Agency hosted a series of visits during the summer of 2018 in communities directly impacted by PFAS to better understand ways the Agency can best support the work being done at the state, local, and tribal levels. EPA interacted with more than 1,000 people during events held in New Hampshire, Pennsylvania, Colorado, North Carolina, and Kansas. In addition, EPA hosted a roundtable in Michigan and held events with tribal representatives. Using information from the National Leadership Summit, community engagements, and public input provided by the docket, EPA plans to release a PFAS Management Plan in 2019.

As part of the Agency's efforts to develop a PFAS Management Plan, in late 2018, EPA released draft toxicity assessments for GenX chemicals and perfluorobutane sulfonic acid (PFBS) for public input. When finalized, these toxicity assessments may be used by federal partners, states, tribes, and local communities to better understand the potential risk associated with human exposures to these PFAS chemicals.

*PFAS Community Engagement Panel in Horsham, Pennsylvania*

## Rebuilding America's Water Infrastructure

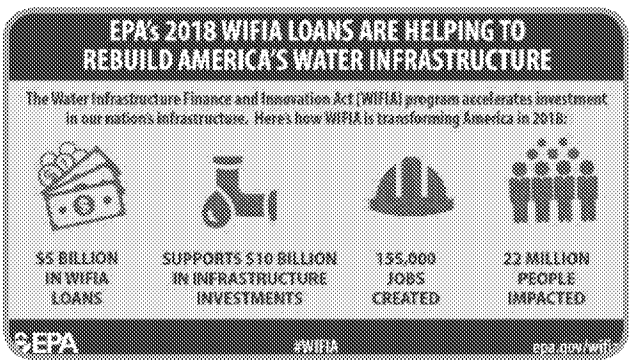
### *WIFIA*

EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program plays an important part in fulfilling this need as part of President Trump's plan to upgrade the nation's infrastructure. EPA's WIFIA federal loan and guarantee program aims to accelerate investment in the nation's water infrastructure by providing long-term, low-cost supplemental credit assistance for regionally and nationally significant projects. By the end of 2018, EPA closed seven WIFIA loans totaling nearly $2

billion in loans to help finance over $4 billion for water infrastructure projects and create up to 6,000 jobs. Because the WIFIA program offers loans with low interest rates, these WIFIA loans saved borrowers up to $705 million.

In November 2018, EPA invited 39 additional projects in 16 states and Washington, D.C. to apply for a WIFIA loan. Together, the selected borrowers will receive WIFIA loans totaling approximately $5 billion to help finance over $10 billion in water infrastructure investments and create up to 155,000 jobs.

*Acting Administrator Wheeler with San Diego Mayor Kevin Faulconer accepting a $614 million WIFIA loan for the first phase of Pure Water San Diego*




### *State Revolving Funds*

The Clean Water and Drinking Water State Revolving Funds also play an integral role in President Trump's efforts to improve and upgrade the nation's water infrastructure and ensure all Americans have access to clean and safe water. In FY 2018, the Drinking Water State Revolving Fund (DWSRF) committed $2.8 billion in drinking water infrastructure loans and refinancing and disbursed $2.5 billion for drinking water infrastructure to improve the nation's public health. In addition, the DWSRF committed $194 million for prevention-focused activities supporting drinking water systems' technical, managerial, and financial capacity, as well as operator certification and source water protection. In FY 2018, the Clean Water State Revolving Fund committed $6.8 billion in clean water infrastructure loans and refinancing and disbursed $6.3 billion for clean water infrastructure to improve our nation's public health.

### Modernizing the Clean Water Act Permitting Process

Consistent with the Trump Administration's priorities, Clean Water Act Section 404 dredged and fill permits support important infrastructure projects like highways, airports, dams, levees, mines, and housing developments. Working cooperatively with states and tribes, the regulated community, and other stakeholders, EPA took multiple actions in 2018 toward streamlining CWA section 404 permitting processes including:

- Initiating a rulemaking to update the Section 404(g) regulations to clarify which waters a state or tribe assumes permitting responsibility for and to foster interest in state and tribal assumption of Section 404 permitting authority. To date, only Michigan and New Jersey have assumed administration of the Section 404 program—the U.S. Army Corps of Engineers (Corps) retains permitting authority for the rest of the country;

- Evaluating updates to the regulations governing EPA's role in restricting disposal sites under Section 404 (c) to increase predictability and provide regulatory certainty for all stakeholders;

- Announcing the consideration of opportunities to enhance effective implementation of the Section 401 certification process, including updating regulations, developing guidance, or training; and

- Proposing a rule with the Corps to achieve greater efficiencies in the current review and approval process for proposed compensatory mitigation banks, Interagency Review Team, and in-lieu fee programs related to Section 404 permits.

**Clean Water Act Glossary**

**Section 401:** Authorizes states to certify that permits and licenses issued by the federal government will not violate local water quality standards.

**Section 404:** Authorizes the permitting of discharges of dredged or fill material into "waters of the United States" including wetlands.

# LAND: Revitalizing Land for Reuse

## Superfund

Over the past year, EPA has made major strides across the board on Superfund site remediation and program reform. In FY 2018, the Agency deleted all or part of 22 sites from Superfund's National Priorities List (NPL), the largest number of deletions in one year since FY 2005.

**NPL Deletions:**

1. C & D Recycling, Foster Township, Pennsylvania
2. Davenport and Flagstaff Smelters, Sandy, Utah
3. Davis Timber Company, Hattiesburg, Mississippi
4. Dorney Road Landfill, Upper Macungie Township, Pennsylvania
5. Eureka Mills, Eureka, Utah
6. Frontier Hard Chrome, Inc., Vancouver, Washington
7. Fulton Terminals, Fulton, New York
8. Hatheway & Patterson, Mansfield, Massachusetts
9. Nutting Truck & Caster Co., Faribault, Minnesota
10. Old Esco Manufacturing, Greenville, Texas
11. Old Southington Landfill, Southington, Connecticut
12. Ordnance Works Disposal Areas, Morgantown, West Virginia
13. Reasor Chemical Company, Castle Hayne, North Carolina
14. Recticon/Allied Steel Corp., East Coventry Township, Pennsylvania
15. Union Chemical Co., Inc., South Hope, Maine
16. Vancouver Water Station #1 Contamination, Vancouver, Washington
17. Vancouver Water Station #4 Contamination, Vancouver, Washington
18. Whitehouse Oil Pits, Whitehouse, Florida

**Partially Deleted Sites:**

1. Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota
2. Omaha Lead in Omaha, Nebraska
3. Pacific Coast Pipe Lines, Fillmore, California
4. Peters Cartridge Factory, Kings Mills, Ohio

Under the Trump Administration, the Superfund program has reemerged as a priority to fulfill and strengthen the Agency's core mission of protecting human health and the environment. On the one-year anniversary of the Superfund Task Force, EPA highlighted successes and progress over the past year while outlining work to be done in year two.

- *Achieving Key Milestones at Sites on the Administrator's Emphasis List.* After the inaugural release initial of the Administrator's Emphasis List (AEL) on December 8, 2017, which included 21 National Priorities List (NPL) Superfund sites across the United States targeted for immediate and intense attention, substantial progress has been made at AEL sites. EPA has since updated the dynamic list each subsequent quarter while sites achieve major milestones throughout the Superfund process.

- *Moving More Sites Towards Deletion/Partial Deletion.* Due to more direct attention to the sites potentially eligible for partial or full deletion from the NPL, the program deleted all or part of 22 sites from the NPL in the past fiscal year.

- *Improving Information on Human Exposure Status.* EPA launched a Human Exposure Dashboard providing real-time human exposure status for all NPL sites in an easily accessible webpage. In FY 2018, the Agency designated an additional net total of 32 sites as having human exposure to contamination under control for a total of 1,507 sites under control.

- *Promoting Redevelopment and Community Revitalization at Targeted Sites.* After releasing a Redevelopment Focus List of 31 NPL sites with the greatest reuse potential, EPA has responded to over 120 redevelopment-related prospective purchaser inquiries and created a new informational mapping tool that provides site-specific details on each of the 31 sites. Two noteworthy examples of EPA's redevelopment efforts are the Libby Asbestos site in Libby, Montana; and the Peoples National Gas site in Dubuque, Iowa.

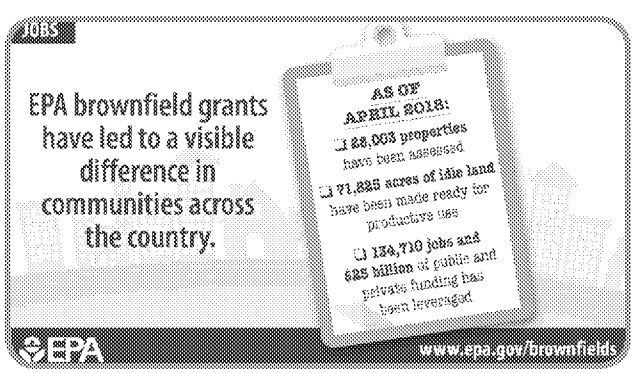
- *Developing Tools and a Process to Encourage Third-Party Investment.* EPA created a national team of redevelopment experts led by EPA and the U.S. Department of Justice (DOJ) to help address liability concerns of third-party entities and developers. EPA and DOJ issued a new policy that encourages more frequent consideration of Bona Fide Prospective Purchaser Agreements and Prospective Purchaser Agreements, when appropriate, to foster cleanup and reuse of NPL sites.

- *Engaging with Partners and Stakeholders.* EPA held or participated in more than 1,370 public meetings and 3,190 in-person meetings or interviews with community members living near Superfund sites. Senior EPA leaders also met on a regular basis with environmental justice groups as well as other federal agencies and a variety of state and tribal organizations to obtain their ongoing input on Task Force work. The Agency also conducted online listening sessions open to the public to obtain feedback on implementing many of the enforcement-related recommendations.

As outlined in the "2018 Update," the Agency plans to complete implementation of the Superfund Task Force recommendations by September 2019 and will have fully integrated that work into EPA's Superfund program. These achievements will provide certainty to communities, state partners, and developers that the nation's most hazardous sites will be cleaned up as quickly and safely as possible.

Another significant achievement in FY 2018 was increasing the annual number of sites returned to communities for redevelopment. By redeveloping Superfund sites, communities are able to reuse thousands of acres of formerly contaminated land, often strengthening local economies. In FY 2018, EPA committed to increase the number of NPL sites that achieved sitewide ready for anticipated use (SWRAU) by roughly 25 percent over the previous year. Through focused management attention and improved program practices, EPA achieved this goal: 51 sites reached SWRAU in FY 2018, the highest total since FY 2013. Many sites that EPA has designated as ready for reuse in previous years now host parks, business districts, renewable energy facilities, wildlife habitat, neighborhoods, and farms.

Brownfields




The Agency also achieved significant on-the-ground accomplishments at Brownfields sites throughout the nation. In FY 2018, the Brownfields Program reported 861 properties ready for reuse, 1919 assessments complete, and 143 properties cleaned up. The program also reported leveraging over $2.2 billion dollars and over 11,000 jobs. All FY18 accomplishments exceeded their targets for the year.

| FY 2018 Brownfields Program Accomplishments | | |
|---|---|---|
| Performance Measure | FY 2018 Targets | FY 2018 Accomplishments |
| Properties Assessed | 1300 | 1919 |
| Properties Cleaned Up | 130 | 143 |
| Jobs Leveraged | 7,000 | 11,197 |
| Dollars Leveraged | $1.1 Billion | $2.201 Billion |
| Properties Made Ready for Reuse | 684 | 861 |

In addition, EPA provided $54.3 million in Brownfields grants to assess and clean up contaminated properties and promote economic redevelopment nationwide, helping to return blighted properties to productive reuse. EPA provided an addition $15.7 million in supplemental funds for cleanups of contaminated Brownfields sites in communities across the country. These grants help communities reuse vacant and abandoned properties and turn them into community assets such as housing, recreation and open space, health facilities, social services, transportation options, infrastructure, and commerce opportunities.

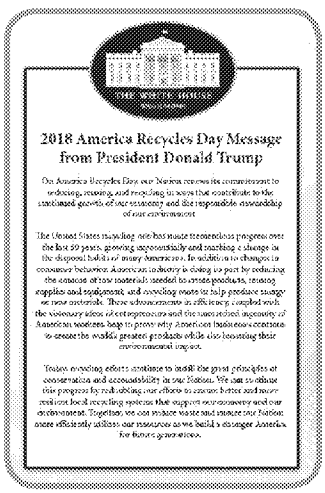
In May, EPA selected 17 organizations to receive $3 million for environmental workforce development and job training programs across the country. These grants support programs to help local residents learn the skills needed to secure employment in the environmental field. Since the program started in 1998, EPA's Environmental Workforce Development and Job Training Program has trained and placed more than 12,850 individuals in careers related to land remediation and environmental health and safety.

After President Trump signed into law on March 23, 2018, the Brownfields Utilization, Investment and Local Development Act (BUILD Act), the Agency immediately began its efforts to implement its key provisions. EPA

updated guidance documents to reflect the new certainty and liability protections for state and local government entities as well as Alaska Native villages. In June, EPA asked for public comment on how best to implement the increased grant-size authority and the new multi-purpose and small community assistance grants. EPA is finalizing the FY 2019 grant guidelines to ensure new criteria for clean energy and waterfront properties, as well as location within opportunity zones, are given appropriate weight in making final grant decisions. Additionally, EPA has hosted webinars, conducted outreach sessions, and given numerous presentations outlining the new opportunities under the BUILD Act.

## Sustainable Materials Management & Recycling

Under Acting Administrator Andrew Wheeler's leadership, EPA's held its first-ever Recycling Summit. The summit, convened on America Recycles Day, brought together leaders from industry and all levels of government to discuss opportunities to advance and strengthen the domestic recycling industry and markets. More than 40 manufacturers, retailers, waste management companies, trade associations, NGOs, and investment funds signed a unified pledge to commit to work together to improve the state of the recycling system in the United States.



2018 America Recycles Day Message from President Donald Trump

On America Recycles Day our Nation renews its commitment to reducing, reusing, and recycling in ways that contribute to the continued growth of our economy and the responsible stewardship of our environment.

The United States recycling rate has made tremendous progress over the last 30 years, growing exponentially and reaching a change in the disposal habits of many Americans. In addition to changes in consumer behavior, American industry is doing its part by reducing the amount of raw materials needed to create products, limiting supplies and equipment, and recycling waste to help produce usable or new materials. These advancements in efficiency, coupled with the visionary ideas of entrepreneurs and the unmatched ingenuity of American workers, help to prove why American businesses continue to create the world's greatest products while also lessening their environmental impact.

Today's recycling efforts continue to instill the great principles of conservation and accountability in our Nation. We can continue this progress by redoubling our efforts to execute better and more resilient local recycling systems that support our economy and our environment. Together, we can reduce waste and ensure our Nation more efficiently utilizes our resources as we build a stronger America for future generations.

### *Four Recycling Action Areas*

1. The development of effective outreach and education strategies for consumers, local, tribal and state governments, as well as other stakeholders, on what to do with recyclable materials at end-of-use will improve the quality and quantity of materials that Americans recycle, which will strengthen markets for those recyclable materials.

   Since 1960, the U.S. recycling rate has increased from less than 7 percent to 35 percent in 2015. An EPA study found that every 10,000 tons of materials recycled supports nearly 16 jobs and $760,000 in wages.

   Focusing on only recycling materials that are locally accepted – like cardboard, metals cans, and paper – will reduce contamination and ensure that more materials get a second life and go back into the economy. Putting the wrong things in the bin can increase the cost of recycling for a community, cause everything to end up as garbage rather than recycled, and endanger the safety of workers at local recycling facilities. Items like plastic bags, batteries, and electronics should never go in the recycling bin, but these can often be donated or recycled somewhere else, such as taking plastic bags back to the grocery store collection bin, taking used batteries to hardware stores or collection centers, or donating used electronics.

2. New investments to upgrade and modernize the national recycling infrastructure can produce a more resilient national recycling system capable of withstanding changes in the recyclable material stream and markets.

3. Encouraging communication and collaboration among the different sectors of the economy, including private enterprise and governmental entities, will support the innovation, development, manufacture, and reuse of high-quality recyclable materials that consumers want to purchase, that manufacturers want to use as feedstock, that retailers want to offer for sale, and that recyclers want to collect and reprocess. A stronger domestic recycling market will support local communities by creating more jobs, provide the overall U.S. economy with greater resilience and self-reliance, and present achievable cost savings for municipalities.

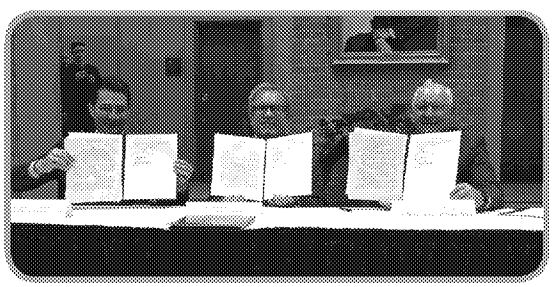
Acting Administrator Wheeler convenes the first-ever EPA Recycling Summit on America's Recycling Day

4. Working together to standardize and align the measurement and tracking of recyclable materials will help better inform actions and investments to improve recyclable materials management in the U.S.

### *Reducing Food Waste*

Together, the Trump Administration's EPA, U.S. Department of Agriculture (USDA), and Food and Drug Administration (FDA) launched the "Winning on Reducing Food Waste" initiative to improve coordination and communication across federal agencies as we work to better educate Americans on the impacts and importance of reducing food loss and waste. Wasted food is the single largest category of material placed in municipal landfills and represents nourishment that could have helped feed families in need, feed animals or be used for industrial purposes or composting. Effectively reducing food waste will require cooperation among federal, state, tribal and local governments, faith-based institutions, environmental organizations, communities, and the entire supply chain.

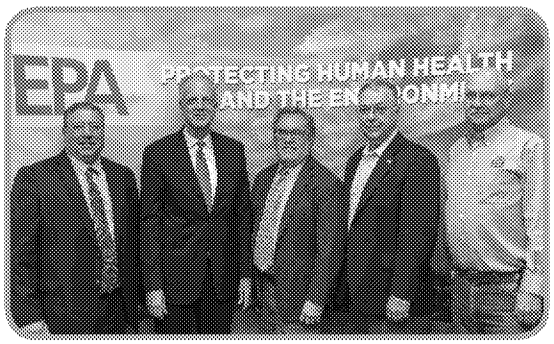
Acting Administrator Wheeler, USDA Secretary Sonny Perdue, and FDA Commissioner Scott Gottlieb joined by 2030 Food Champions



Acting Administrator Wheeler, USDA Secretary Sonny Perdue, and FDA Commissioner Scott Gottlieb sign the Trump Administrations' "Winning on Food Waste" initiative

### EPCRA

The Agency signed a proposed rule to amend the emergency release notification regulations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to make clear that reporting of air emission from animal waste at farms is not required under EPCRA. The proposal aims to provide livestock producers with greater regulatory certainty. It will also allow emergency response officials to focus on readiness and emergencies, not animal waste.




Acting Administrator Wheeler, Kansas Senator Jerry Moran, members of the emergency response community, and agriculture stakeholders

**"Farmers and ranchers continue to face numerous challenges, and the removal of this unnecessary and burdensome regulation is welcome news for producers across our state. It was never the intent of Congress for normal odors from animal waste on farms to fall under our nation's emergency hazardous waste reporting requirements, so I appreciate Administrator Wheeler taking definitive action today to provide certainty to the livestock industry. The resources of our emergency responders ought to be focused on protecting the public from true environmental and chemical emergencies, not odors from animal waste."**

**– Senator Jerry Moran (KS)**

### Coal Ash

In July, EPA finalized the first set of revisions to the 2015 regulations for the disposal of coal combustion residuals, also known as CCR or coal ash, from electric utilities and independent power producers. The first set of revisions provides utilities and states more flexibility in how CCR is managed and saves between $28 to $31 million a year in regulatory costs.

EPA also approved Oklahoma's application to operate a permit program for disposing of coal combustion residuals in landfills and surface impoundments. This approval makes Oklahoma the first state in the nation to run a federally approved coal ash permit program.
EPA has received applications to review coal ash permit programs from Georgia, Alabama, and Kansas. The Agency continues to work with these and several other states, including Arkansas, Arizona, Louisiana, Michigan, Missouri, Nebraska, Texas, and Wisconsin.

# CHEMICALS: Ensuring Safety

## Lautenberg Chemical Safety Act

Over the past year, EPA once again met the deadlines set by the 2016 Frank R. Lautenberg Chemical Safety for the 21st Century Act, which amended the Toxic Substances Control Act (TSCA). EPA staff worked tirelessly to ensure the most modern and innovative chemicals get to market quickly and safely, providing regulatory certainty for manufacturers and confidence for Americans consumers.

On the two-year anniversary, EPA announced it had completed the following milestones:

- *Finalized strategy to reduce animal testing.* The strategy promotes the development and implementation of alternative test methods and strategies to reduce, refine, or replace vertebrate animal testing. It also incorporates input from public meetings and written comments.
- *Final rule on reporting mercury manufacturing and imports.* The information collected through the new reporting requirements will be used to develop future inventories of mercury and mercury-containing product supply, use, and trade in the United States.
- *Guidance for state, tribal, and local governments, and medical personnel and emergency responders on sharing confidential business information (CBI).* These guidance documents specify the process that will enable other governmental entities and medical and emergency personnel to request CBI information.
- *Policy and procedures for assigning unique identifiers to better publicly track information on chemicals while protecting CBI.* An identifier will be applied to a substance, whose identity is protected as CBI, as well as to other related information or submissions concerning the same substance. This will allow the public to connect information related to the same substance, even while the specific identity is protected as confidential.
- *Guidance on structurally descriptive generic names.* This guidance will allow EPA to share more information with the public about the structure of substances while protecting the confidential elements of the substance's specific chemical identity. TSCA Submitters claiming the specific chemical identity of a chemical substance as CBI can supply a structurally descriptive generic name that can be disclosed to the public.

EPA issued the final of four framework rules under Lautenberg with the **final fees rule** under TSCA, ensuring that resources are available to the Agency to complete chemical reviews and actions in a timely, transparent manner while maintaining high scientific standards.

**"With today's action EPA has once again met another important milestone under TSCA. This rule will provide resources needed to support the valuable work EPA does to review chemicals for safety, manage risk as required, and make chemical information available as appropriate."**

**– EPA Acting Administrator Andrew Wheeler**

**"The SBA Office of Advocacy was pleased to be able to work with EPA and the SBA Office of Size Standards to develop the fees rule for the administration of the Toxic Substance Control Act and to be able to assist the agency in revising the small business definition to ensure that the maximum number of small businesses can benefit from a reduced fee amount."**

**– Small Business Administration Office of Advocacy Acting Chief Counsel Major L. Clark III.**

These fees collected from chemical manufacturers will go toward developing risk evaluations for existing chemicals; collecting and reviewing toxicity and exposure data and other information; reviewing Confidential Business Information (CBI); and making determinations in a timely and transparent manner with respect to the safety of new chemicals before they enter the marketplace.

EPA released the **first ten problem formulation documents**, an important interim step prior to completing and publishing the final risk evaluations. The documents refine the scope of risk evaluations for the first ten chemicals selected under the Lautenberg Chemical Safety Act. Months following the release, EPA released the draft risk evaluation for Pigment Violet 29 (PV29), one of the first ten chemicals undergoing risk evaluation under TSCA, delivering on the Agency's promise to meet the

statutory deadlines and ensure the safety of chemicals currently on the market.

The Agency released a number of documents and guidances including (1) the systematic review approach document, (2) "Points to Consider" guidance, and (3) prioritization approach for chemicals in the next group of TSCA risk evaluations.

1. EPA's systematic review approach document will guide EPA's selection and review of studies in addition to providing the public with continued transparency regarding how the Agency plans to evaluate scientific information.

2. "Points to Consider When Preparing TSCA New Chemical Notifications" intends to improve transparency with the public and with companies seeking Agency review of their new chemical substances under TSCA. The guidance promotes early engagement and communication and enhances overall understanding of EPA's technical review and analysis to better move chemicals through the evaluation process. The guidance provides the general public, including new chemical submitters, with important information on:

   (a) General guidance relating to new chemical notices;
   (b) Preparation of pre-manufacture notices (PMNs), Significant New Use Notices (SNUNs), and exemption notices;
   (c) EPA scientific approaches used in conducting PMN assessments; and
   (d) Best practices.

3. In September, EPA released the approach it will use to identify chemicals that could be included in the next group of risk evaluations under TSCA. The document laid out EPA's near-term approach for identifying potential chemicals for prioritization, the initial step in evaluating the safety of existing chemicals under TSCA.

   Building on the Agency's promise to work with the public to select the next chemicals for risk evaluation, this approach reflects public input received at a December 2017 meeting and through the public docket. EPA also took input from the public on which chemicals should be prioritized for risk evaluation and which chemicals may be low priorities under TSCA.

   The document also includes a longer-term risk-based strategy for managing the larger TSCA chemical landscape which, according to the TSCA Inventory, is composed of more than 40,000 active chemicals. This longer-term approach can be used to inform multiple activities and priorities throughout EPA, including within the TSCA program.

### New Asbestos Regulation

EPA proposed the first regulation on asbestos to prevent new uses of asbestos. EPA is proposing to ensure that manufacture, import, or processing for these currently unregulated new uses identified in the regulation are prohibited unless reviewed and approved by the Agency. Previously, anyone could have resumed the use of asbestos without seeking approval from the Agency. Once finalized, EPA will be closing this loophole.

### Pesticides

In time for the growing season, EPA extended the registration of dicamba for two years to control weeds in fields for cotton and soybean plants genetically engineered to resist dicamba. This action was informed by input from and extensive collaboration between the Agency, state regulators, farmers, academic researchers, pesticide manufacturers, and other stakeholders. EPA tightened the label requirements to ensure that these products can continue to be used effectively while addressing potential concerns to surrounding crops and plants.

The Agency completed 99.7% of the 2,199 Pesticide Registration Improvement Act (PRIA) pesticide registration actions on time, registered 23 new active ingredients, most of which were classified as reduced-risk pesticides, and registered 147 new uses of existing pesticides, providing new tools to growers to meet their pest management needs.

EPA also released a draft policy to reduce the use of animals in testing chemicals that may irritate the skin or cause an allergic reaction. The draft policy describes the science behind the non-animal alternatives that can now be used (in vitro, in silico, in chemico) to identify skin sensitization, which is necessary for pesticide registrations. In addition, by waiving data requirements within the pesticides program, EPA is saving over 16,000 test animals.

# ENFORCEMENT

EPA's enforcement and compliance program has focused on priority environmental risks and non-compliance problems. The focus on these areas has resulted in larger, more complex cases with greater reductions in pollution. While states do most of the work in authorized programs, EPA has a lot of tools to help assure compliance with federal environmental laws.

At one end of the spectrum, EPA is encouraging compliance by promoting self-audits. Between FY 2017 and FY 2018, the number of facilities that voluntarily disclosed violations and certified a return to compliance **increased by 47 percent, from 1,062 to 1,561**. At the other end of the spectrum, EPA is deterring non-compliance by **increasing the number of new criminal cases** in FY 2018, reversing a downward trend that began in 2011.

Where EPA does take the lead, we strive to make sure the cases result in meaningful environmental outcomes. In FY 2018, EPA **increased environmental outcomes** by requiring regulated entities to **treat, minimize or properly dispose of over 540 million pounds of waste** and to **reduce, treat, or eliminate nearly 268 million pounds of air, toxics, and water pollution.**

In FY 2018, EPA enforcement actions this past year resulted in:

- Prevention of the illegal importation of approximately **2,200 vehicles and engines** that do not comply with EPA emissions standards.
- Reduction of exposure to lead through **140 TSCA lead paint enforcement actions** against renovation contractors, landlords, property managers, realtors, and others.
- Investment of nearly $4 billion in actions and equipment that achieve compliance with the law and control pollution.
- A total of **73 years of incarceration** for individual criminal defendants.
- Cleanups and redevelopment at over **150 sites** through use of Superfund enforcement tools.
- Cleanup of over **244 million cubic yards of contaminated soil and water** by EPA regulated entities.

*Stakeholder Engagement and Compliance Initiatives*

- In January, EPA issued an Interim Guidance on Enhancing Regional-State Planning to set consistent expectations for joint planning, work sharing, and enhanced communication, and to move to a model of shared governance with states.

- EPA also transitioned from National Enforcement Initiatives to National Compliance Initiatives to align priorities with the Agency's strategic plan and to focus on environmental problems, not specific industry sectors. This transition aims to increase the environmental law compliance rate and reduce the average time from violation identification to correction.

- Throughout this year, the Agency worked to be more timely in notifying facilities of inspection results to increase certainty and speed of correction of violations. The Interim Policy on Inspection Report Timeliness and Standardization directs inspectors to flag compliance concerns with the facility at the time of inspection. In addition, EPA will prepare most inspection reports and provide them to facilities within 70 days of an inspection.

- On the efficiency side, EPA shared a draft of New Owner Clean Air Act Audit Program for Oil and Natural Gas Exploration and Production Facilities with stakeholders for input. EPA is in the process of developing a New Owner Clean Air Act Audit Program tailored for the oil and natural gas sector. This program will provide environmentally protective efficiencies and certainty in the oil and natural gas sector for timely and cost-effective Clean Air Act compliance.

- EPA reemphasized the use of self-audits and self-disclosure to achieve compliance. For example, Region 8 signed a Memorandum of Agreement (MOA) with the Wyoming Department of Environmental Quality to encourage the use of the Wyoming self-audit law. The MOA makes clear that EPA will defer to the judgment of the State on how it manages penalties associated with disclosures under the state's law so long as threats to the environment are fully addressed. The goal is to provide certainty to

the regulated community that they will only deal with the state when negotiating the penalty aspect of a self-disclosure. EPA recognizes that Wyoming's self-audit law and policy encourages greater compliance with laws and rules protecting public health and the environment.

**STRONGER**

February 2018: Environmental Council of the States (ECOS) and Interstate Oil and Gas Compact Commission (IOGCC) convened an oil and gas sector roundtable meeting at EPA's Region 8 office in Denver with participation from senior EPA, state, tribal, ENGO representatives, and the State Review of Oil and Natural Gas Environmental Regulations (STRONGER).

November 20018: EPA entered into a Memorandum of Understanding (MOU) with the non-profit, multi-stakeholder, educational organization known as STRONGER.

**"This MOU will provide more opportunities for EPA and STRONGER to work together to improve both environmental protections and economic outcomes. By collaborating with STRONGER, we can enhance our enforcement and compliance efforts while ensuring America's historic energy production under President Trump continues."**

**– EPA Acting Administrator Andrew Wheeler**

**"We are very excited to enter this MOU with EPA and look forward to new opportunities for cooperation as we continue STRONGER's important work enhancing protection of human health and the environment."**

**– STRONGER Executive Director Ryan Steadley**

While STRONGER will continue to develop guidelines and conduct reviews of state oil and natural gas programs, the MOU will provide the parties with greater opportunities for collaboration in areas of mutual interest for both STRONGER and EPA. EPA and STRONGER will work together to identify specific areas for collaboration. Such areas of collaboration may include providing platforms for meaningful stakeholder engagement, the identification of emerging issues impacting states and tribes, or the development of improved compliance assistance tools. The MOU is yet another example of the Trump EPA's commitment to protecting human health and the environment through the creation of strategic partnerships.

*Superfund Enforcement.* EPA's Superfund enforcement efforts in 2018 resulted in cleanups and redevelopment at over 150 sites including Big River Mine Tailings, Centredale Manor Superfund Site, and McLouth Steel Facility.

1. In the three ZIP codes comprising the majority of the Big River Mine Tailings Site, between 9.3 and 16.7 percent of children have an elevated blood lead level above 5 micrograms per deciliter. EPA entered into two settlements to address lead contaminated soil at over 4,000 residential properties at the Big River Mine Tailings Site, located approximately 70 miles from St. Louis, Missouri.

2. The Agency secured a $100 million cleanup at the Centredale Manor Superfund Site in North Providence, Rhode Island. Through EPA-led enforcement, two subsidiaries of Stanley Black & Decker, Inc.—Emhart Industries Inc. and Black & Decker, Inc.— agreed to clean up dioxin-contaminated sediment and soil at the site.

3. At the McLouth Steel Facility, EPA entered into an agreement to support cleanup and redevelopment of the site in Trenton, Michigan. This agreement requires responsible parties to:
   - Demolish about 45 structures;
   - Remove asbestos-containing material, containerized waste and materials containing PCBs from all structures prior to demolition;
   - Install a fence around the property;
   - Remove contaminated water and sludges from 23 subsurface structures (pits, basements and lagoons), clean or remove the structures and, if the structures remain, fill them with clean fill materials;
   - Investigate five areas where PCBs may have been released; and
   - Assess and report on options for stormwater management to eliminate uncontrolled flow to the Trenton Channel of the Detroit River.

These actions will safeguard human health and the environment by reducing the risk of exposure to certain hazardous wastes and substances during development of the property.

**Civil and Criminal Cases:** EPA also took strong civil and criminal enforcement actions to address significant pollution and non-compliance problems and to deter future violations.

*Derive Systems*

- EPA's settlement with Derive Systems addressed the sale of approximately 363,000 aftermarket defeat device products which allegedly were designed, in part, to defeat the emissions control systems of cars and trucks in violation of the Clean Air Act.
- Over a span of multiple years, Derive sold products, including custom engine tuning software and parts, online and at distributers across the nation under the brand names of "Bully Dog" and "SCT" for use in many types of gasoline and diesel-fueled cars and trucks. Under the terms of the settlement, Derive will spend approximately $6.25 million to ensure future compliance, and pay a civil penalty of $300,000.

*MPLX LP*

- Under a settlement with EPA, Oklahoma, Pennsylvania, and West Virginia, MPLX LP and 11 of its subsidiaries agreed to address equipment and storage tank leaks at 20 natural gas processing plants across the U.S., reducing VOC emissions by more than 1,500 tons per year.
- *Pittsburgh Post-Gazette*: "Natural gas processor to pay nearly $7M to settle pollution violations"
- Washington County's *Observer-Reporter*: "Houston plant's owner enters multimillion-dollar settlement with EPA"

*City of Lancaster*

- In partnership with the Commonwealth of Pennsylvania, the City of Lancaster committed to address combined sewer overflows by developing a long-term control plan that includes the use of green infrastructure projects.

*Chevron*

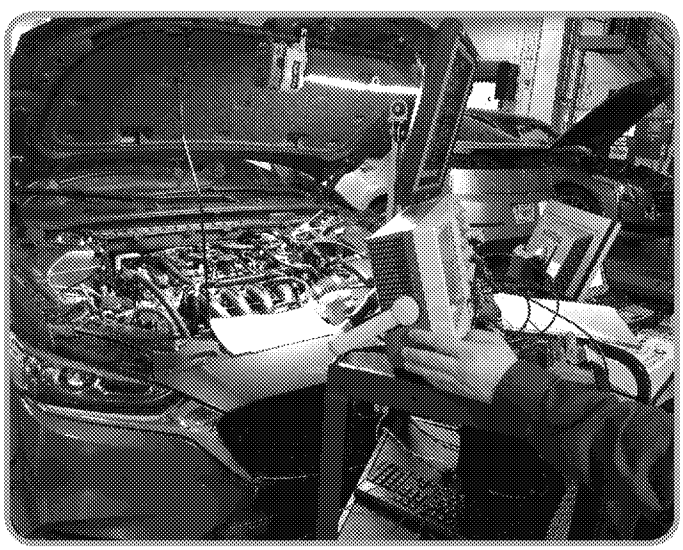
- EPA, in participation with the State of Mississippi, reached a nationwide settlement with Chevron USA that requires process safety improvements at all of its domestic refineries to prevent accidental chemical releases.
- As part of the settlement, Chevron will spend approximately $150 million to replace vulnerable pipes, institute operating parameters and alarms for safer operation, improve corrosion inspections and training, centralize safety authority within the corporation, conduct a pilot study of safety controls for fired heaters, and make other safety improvements at all its domestic refineries.
- Chevron also will pay a $2.95 million civil penalty and will implement supplemental environmental projects worth at least $10 million in the communities surrounding the refineries in California, Mississippi, Utah, and Hawaii.
- *San Francisco Chronicle*: "Chevron to pay $150 million in settlement with EPA for violating Clean Air Act"
- *CBS San Francisco*: "Chevron Upgrading Safety After EPA Richmond Refinery Fire Settlement"

*U.S. Technology Corporation*

- EPA secured a guilty plea from the operators of U.S. Technology Corporation for illegally transporting 9 million pounds of hazardous waste from Mississippi to unpermitted facility in Missouri.
- *St. Louis Business Journal*: "4 plead guilty to illegally shipping hazardous waste to Missouri"

*IAV GmbH*

- EPA secured a guilty plea from IAV GmbH, a German company that engineers and designs automotive systems, for its role in the Volkswagen AG scheme to sell diesel vehicles in the United States that cheat U.S. vehicle emissions tests required by federal law.
- IAM GmbH agreed to plead guilty to one criminal felony count and pay a $35 million criminal fine.
- *Detroit Free Press*: "Auto supplier fined millions in U.S. diesel emissions fraud"



# NATURAL DISASTER PREPAREDNESS, RESPONSE & RECOVERY

Throughout 2018, EPA worked closely with states and territories to prepare for and respond to a number of natural disasters including: Hurricanes Florence and Michael, Super Typhoon Yutu, and the catastrophic Camp fire in California.

In June, EPA senior leaders gathered in New Orleans, Louisiana, to discuss the Agency's preparations for the 2018 hurricane season. At that time, EPA had approximately 60 personnel on the ground in Puerto Rico and U.S. Virgin Islands and in the Regional Emergency Operations Center in Edison, NJ dedicated to response, recovery, and readiness.

Building on lessons learned from sustained emergency response in 2017, EPA stands prepared to respond to critical environmental and public health threats. After Kilauea Volcano erupted in Hawaii on May 3, 2018, releasing lava from the lower East Rift Zone, EPA monitored air quality and provided data management support in response. In a text-book example of how to work with local entities, EPA developed web applications in conjunction with local communities to provide real-time air quality data to local residents.

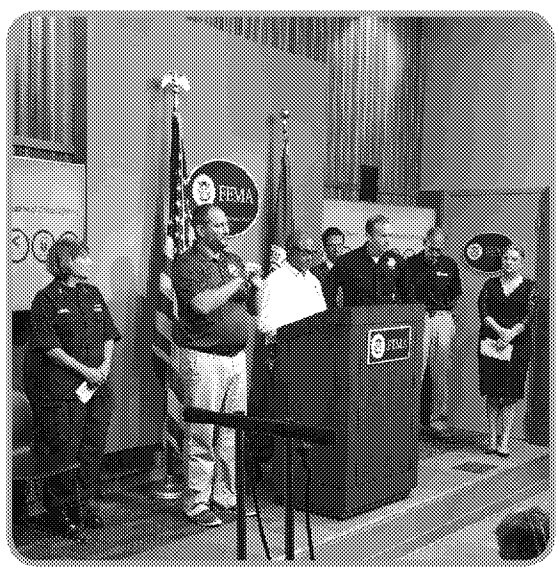
## Hurricanes

During 2018's hurricane season, EPA assisted with response efforts related to nationally significant storms including Hurricanes Florence and Michael, and Super Typhoon Yutu.

### *Hurricanes Florence & Michael*

EPA activated emergency response centers in Philadelphia, PA; Atlanta, GA; and Washington, D.C. to provide support. In addition, the Agency worked with its federal, state, and local partners to ensure that National Priorities List (NPL) sites, Facility Response Plan (FRP) facilities, and Risk Management Plan (RMP) facilities in the storm's path were secured, developed plans to assist with assessing water systems, and processed emergency fuel waivers.

Hurricane Michael — one of the most powerful storms to ever make landfall in the continental U.S. — struck Florida on October 10, 2018 as a Category 4 hurricane. EPA provided support to Florida's state emergency operations center to assist with response efforts, while also providing assistance via the Agency's headquarters and regional emergency response centers. EPA also performed a preliminary assessment of all NPL sites in the projected and actual cones of influence and deployed field assessment teams to NPL sites impacted by the storm in Georgia and Florida. Working with federal, state, and local partners, the Agency also verified the security and safety of FRP facilities and RMP facilities in the storm's path, deployed field teams to assist with assessing drinking water and wastewater treatment systems, processed emergency fuel waivers, and deployed field teams to assist with debris management.



EPA Office of Emergency Management Director Reggie Cheatham participates in a press conference with FEMA

In emergency response efforts, Region 4 had more than 40 personnel on-the-ground. During the recovery phase of the responses to the hurricanes, Region 4 Superfund staff coordinated post-landfall assessments of NPL and NPL-caliber Superfund sites impacted by the storm and conducted inspections at 127 NPL sites.

EPA issued a number of fuel waivers to assist in distributing fuel needed for voluntary and mandatory evacuations as well as no action assurances in cases where it is necessary to avoid extreme risks to public health and safety, including:

- Federal Reid vapor pressure requirements waiver for fuel sold in designated areas in North Carolina, South Carolina, Georgia, and Virginia to minimize problems with the supply of gasoline. EPA also waived in these same states the prohibition on the blending of reformulated gasoline blendstock for oxygenated blending with other gasoline blendstock or oxygenate. EPA intended these waivers to assist in distributing fuel needed for voluntary and mandatory evacuations. Additionally, EPA waived the highway diesel fuel red dye requirements to allow the sale and use of non-road diesel fuel in highway vehicles in North Carolina and Florida.
- Four no action assurances as requested by Florida, North Carolina, and Virginia regarding the loading and unloading of fuel at bulk gasoline terminals, pipeline breakout stations, marine tank vessel loading operations, and gasoline loading racks.
- One no action assurance as requested by Florida to assure continued electric power supply to the Florida Keys.


EPA Region 2 Emergency Responders collect household hazardous waste following Hurricane Maria

### Wildfires

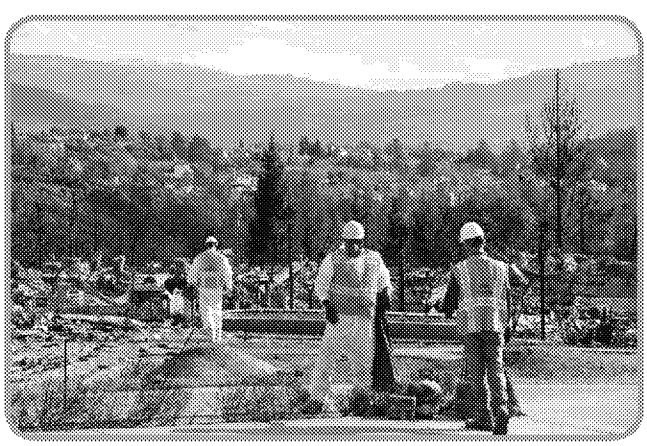
The Camp, Woolsey, and Hill fires significantly impacted three California counties — Butte, Ventura, and Los Angeles. In the aftermath of these fires, EPA is leading a response effort involving staff from all Regions to collect household hazardous waste from 14,528 parcels and in three counties. EPA Region 9 also conducted radiation monitoring in southern California in coordination with the U.S. Department of Energy and State of California. EPA is fielding 300 staff and contractors and has completed approximately half the cleanup to date – the largest in Region 9's history.

In addition to the afformentioned nationally significant incidents, EPA engaged, as needed, on several regionally significant incidents over 2018, including train derailments (New York Susquehanna and Western Railway in New York; Union Pacific, Minnesota; Burlington Northern Santa Fe, Iowa), wildfires impacting Superfund sites (Iron Mountain Mine, Carr Fire, California), a steam pipeline rupture (Consolidated Edison, New York City), and a facility explosion (Western Industrial Gas and Cylinders, Texas).

### 2018 Response Efforts Related to 2017 California Wildfires and Hurricane Maria

Although Hurricane Maria hit Puerto Rico, the U.S. Virgin Islands, and southeast areas of the continental U.S. in 2017, EPA was still involved with response and recovery efforts until early 2018. The Agency continued efforts such as collecting drums, propane tanks, and cylinders; collecting gallons of liquid hazardous waste; and collecting and analyzing drinking water samples. During the ongoing recovery phase, EPA remains actively engaged with Puerto Rico and the U.S. Virgin Islands in advancing long-term remediation and environmental systems management capabilities, while promoting economic recovery and rebuilding efforts.

In addition to Maria's carryover, EPA also continued efforts related to the 2017 wildfires that broke out in four northern California counties—Mendocino, Lake, Napa, and Sonoma. Continued response activities included Superfund site assessments, debris removal, and air quality monitoring.



EPA Region 9 response team removes household hazardous waste following catastrophic wildfires throughout California

# INTERNATIONAL & TRIBAL AFFAIRS

### U.S. – Mexico – Canada Agreement (USMCA) Environmental Cooperation Agreement

On Tuesday, December 11, 2018, Acting Administrator Wheeler signed the trilateral Environmental Cooperation Agreement (ECA) with Canada and Mexico on behalf of the United States. EPA and the U.S. Trade Representative led the U.S. negotiating team for the environmental chapter of the USMCA, which contains the most comprehensive set of enforceable environmental obligations of any trade agreement to date, including first-time provisions to address pressing environmental issues such as air quality and marine litter, and obligations to combat trafficking in wildlife, timber, and fish. The environmental provisions of the USMCA, along with the ECA, help domestic producers compete on a level playing field. It is the first-ever trade agreement among the three nations to include environmental commitments in the body of the agreement. The new agreement strengthens and expands trilateral collaborative efforts to protect and conserve the environment and address emerging environmental challenges. Areas of cooperation include efforts to reduce pollution, strengthen environmental governance, conserve biological diversity, and sustainably manage natural resources.

### Administrator Wheeler Represents the United States at the G7 Environment Ministers Meeting

Acting Administrator Wheeler represented the United States at the G7 Environment Ministers Meeting this year in Halifax, Canada. They discussed a wide range of transboundary pollution issues and launched a G7 Innovation Challenge to Address Marine Plastic Litter. Acting Administrator Wheeler also raised the importance of G7 leadership on improving clean air and clean water globally and he highlighted EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program as a concrete example of potentially replicable models. He also launched several bilateral work streams with his counterparts including redoubling our cooperation with Canada on a range of border issues and setting up a cooperation framework with the European Commission on air quality, marine litter, resource efficiency, and chemicals management.

### Advance Environmental Cooperation with Israel

Acting Administrator Wheeler signed a Memorandum of Understanding (MOU) with the Israeli Ministry of Environmental Protection (MoEP) to continue work on shared issues of concern, including cybersecurity, innovation in water, and remediation of contaminated sites. EPA also participated for the first time in the high-level U.S.-Israel Joint Economic Development Group dialogue in September 2018.

**"Throughout his presidency, President Trump has delivered on his promise to elevate and strengthen our relationship with Israel. We are renewing and fortifying our longstanding partnership with Israel to promote bilateral cooperation on important environmental issues."**

**– EPA Acting Administrator Andrew Wheeler**

**"This agreement enables the United States and Israel to deepen our partnership and address critical environmental challenges together. I am confident that when we combine Israeli technology and expertise with American technology and global reach, there is no challenge that we cannot overcome."**

**– Israeli Ambassador to the United States Ron Dermer**

### Launch Trilateral Initiatives with Canada and Mexico

As Chair of the Commission for Environmental Cooperation (CEC) Council, EPA launched two new North American initiatives addressing key priorities of Canada, Mexico, and the U.S. at the Council Session in June 2018. These initiatives included trilateral cooperation to enhance and share capacities among Canada, Mexico,

and the U.S. to prepare, respond, and improve resiliency to extreme weather events; and an initiative to advance entrepreneurship and innovation for green growth in academic institutions in North America.

### Working Globally: Technical Assistance

- *Improving Laboratory Capacity in Panama:* EPA provided technical assistance to Panama, a U.S. trade partner, to improve its national water quality lab capacity. As a result, Panama has its first national water quality reference lab accredited under ISO 17025. This accomplishment increased Panama's capacity to provide decision makers reliable analytical water quality data for the development or implementation of standards and regulation.
- *Improving Regulatory Processes in Central America:* Under the U.S.-Central America and Dominican Republic Free Trade Agreement (CAFTA-DR), EPA provided technical assistance to member countries (El Salvador, Honduras, Nicaragua, Costa Rica, Guatemala and Dominican Republic) to enhance their environmental impact assessment procedures. As a result, two countries have already experienced a significant reduction of response time for permitting and compliance reports.
- *Strengthening Environmental Laws in Vietnam:* EPA provided technical assistance to the Vietnam Ministry of Natural Resources and Environment (MONRE) in revising Vietnam's overarching National Environmental Law. Prompted by the Formosa fish kill in 2016, EPA assistance is intended to help prevent future major environmental disasters in Vietnam. EPA shared U.S. experiences and case studies for several sections of the law, including environmental impact assessment, permitting, standards development, compensation for environmental damages, enforcement, and public disclosure of environmental information. MONRE plans to submit the new draft law to Vietnam's Parliament in 2019.

### Tribal Achievement

EPA has a strong track record of providing grants to assist tribes in building capacity for federal environmental programs and implementing tribal solid and hazardous waste programs. In 2018, EPA regions awarded more than $63 million under the General Assistance Program, benefiting nearly all federally recognized tribes through awards to 500 tribal governments and approximately 25 intertribal consortia. Funding provided under GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes.

- *Pamunkey Tribe Joins 500 Other Federally Recognized Tribes as Newest Recipient of Capacity Building Funds:* The Pamunkey Indian Tribe, which received federal recognition in 2016, received Tribal GAP funding for the first time in 2018. The Pamunkey Tribe will use these funds to establish an Office of Environmental Protection, sponsor community events, develop environmental plans, and improve solid waste management on the Pamunkey Reservation.
- *EPA provided $5.8 million in funding to 18 tribes in Nevada to invest in environmental programs and water infrastructure.* The Confederated Tribes of the Goshute Reservation will use $182,221 to plan, develop, and implement environmental protection programs, including education and outreach on recycling to tribal members. The Yomba Tribe will use $174,998 to manage environmental programs, clean up a dump site, develop an emergency management plan, and conduct research on a transfer station for recycled materials. The Pyramid Lake Paiute Tribe will use $203,200 to model and evaluate the impact of Truckee River nutrient loads on Pyramid Lake's water quality, ecology, and trophic status. Funds will also support the cleanup and closure of three illegal dump sites and assess the operations of several transfer stations to reduce illegal dumping.
- *EPA awarded $22.1 million to tribes in California to fund projects on water quality monitoring, watershed protection and restoration, water and energy efficiency, and wastewater recycling and treatment. The Agency also awarded $4.5 million to fund Indian Health Service support of tribal drinking water and wastewater infrastructure, plant operator training and technical assistance.* The Big Valley Rancheria will use $173,000 to install corrosion control treatment at its public water system to address elevated levels of lead and copper at 38 tribal homes. The Middletown Rancheria Community will use $547,050 to extend sewer line service connections to the Lake County Sanitation District, removing 40 aging septic systems. The Torres Martinez Desert Cahuilla Indians will use $190,672 to manage environmental programs, including solid and hazardous waste management activities, conducting community outreach, and monitoring Salton Sea air quality.

# RESEARCH & DEVELOPMENT

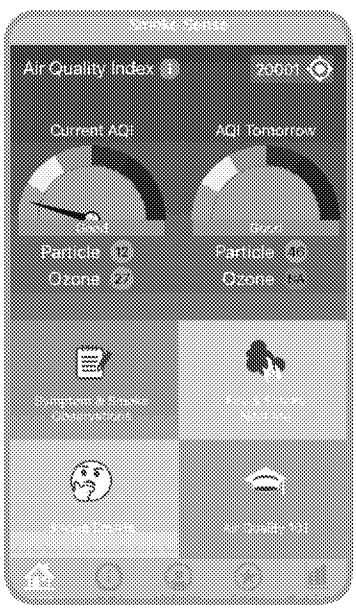
## PFAS

This past year, EPA updated and validated a way to test for an additional four Per- and Polyfluoroalkyl substances (PFAS) in drinking water, including the GenX chemical, hexafluoropropylene oxide dimer acid (HFPO-DA). The updated tools are part of EPA's efforts to increase the amount of research and information that is publicly available for chemicals in the PFAS family.

## Wildfires & Smoke Sense

In 2018, EPA released an updated version of the Smoke Sense app (originally launched in 2017), a mobile application that lets users learn about wildland fires and smoke health risks in their area and report health symptoms they experience.


In addition to the release of the Smoke Sense app, EPA continues to research many aspects of wildfires. In 2018, EPA continued its push to publish research on the health effects of exposure to wildfire smoke. EPA has also created resources for responders, public health officials, and local governments that are all available on EPA's Smoke Ready Toolbox.




## State Support

In addition to the research and monitoring EPA does to support states on an ongoing basis, EPA's Office of Research and Development (ORD) Regional/ORD Community of Science Networking (ROCS-Net) Program strengthens science across the nation by establishing new scientific connections and providing a path to future research collaborations between EPA and state scientists on pressing environmental problems. Each year, the three day program provides an opportunity for regional and state scientists to visit ORD research facilities for discussions with ORD scientists about regional and state science priorities, including topics such as PFAS, lead in drinking water and soil, air quality sensors, hazardous waste management, and sustainable communities. The program began in FY 2017 hosting regional scientists at EPA's facility in Research Triangle Park, North Carolina. In FY 2018, ORD expanded the program to include not only ten regional scientists but also ten state scientists at the laboratory in Cincinnati. In FY 2019, ORD plans to host ten regional and 20 state scientists from across the country at the EPA facility in Research Triangle Park, North Carolina.

In addition to ROCS-Net, EPA continues to host numerous outreach opportunities with state partners on a variety of issues including:

- Bi-monthly calls with the Environmental Council of the States on a range of issues including PFAS science and technical issues;
- Quarterly calls with the Environmental Research Institute of the States Board; and
- Monthly EPA Tools and Resources webinars on topics such as water reuse, PFAS, harmful algal blooms, contaminated sites, wildfires, lead modeling, and drinking water systems.

## Supporting Small Business & Students

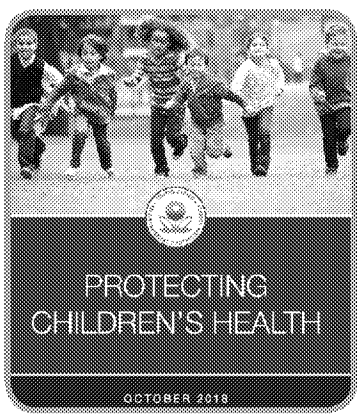
EPA continues to support small businesses across the country through its Small Business Innovation Research program. This funding helps small businesses develop innovative technologies for the marketplace. In 2018, EPA awarded $3.5 million to 22 small businesses in Phase I and Phase II contracts to develop innovative technologies and solutions for environmental issues.

Through Phase I of the People, Prosperity, and the Planet (P3) grants program, EPA provided over $463,000 in funding for 31 college student teams from across the country, who are developing sustainable technologies to solve current environmental and public health challenges. Through Phase II of P3, EPA provided more than $557,000 in funding for eight student teams.

# CHILDREN'S HEALTH

## Children's Health Month

One of the most important things we can do to protect our children is to make sure they grow up in a healthy and safe environment. Children are uniquely vulnerable to the potential health effects of environmental hazards found in their everyday environments. In honor of Children's Health Month in October, EPA highlighted the Agency's commitment to children's health and research by publishing a new booklet titled, "Protecting Children's Health."




The booklet not only details EPA's initiatives currently underway in partnership with federal agencies, states, tribes, local governments, schools, community groups, medical providers, and other stakeholders, but also showcases new efforts under the Trump Administration to protect children where they live, learn, and play.

**"Children's health is a top priority at EPA, and we have made tremendous progress improving air and water quality and helping kids and families lead healthier lives. In recognition of National Children's Health Month, EPA is announcing new funding to reduce lead exposure, improve air quality, and help children and families prosper."**

**– EPA Acting Administrator Andrew Wheeler**

During Children's Health Month, EPA announced the availability of nearly $30 million to support safe drinking water and cleaner air. EPA is making $20 million available for states and tribes to test for lead in drinking water at schools and childcare facilities through a new grant program.

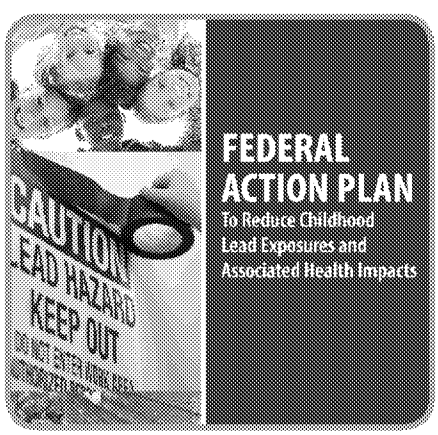
At the same time, EPA announced approximately $9 million in rebates to public school bus fleet owners to help them replace older school buses with cleaner, more efficient models. Through Diesel Emission Reduction Act funding, EPA has helped upgrade 25,000 school buses across the country for America's schoolchildren to date.

## REDUCING LEAD EXPOSURE

Since the 1970s, the United States has made tremendous progress in lowering children's blood lead levels. Lead exposure, particularly at higher doses, continues to pose a significant health and safety threat to children, preventing them from reaching their fullest potential. The Centers for Disease Control and Prevention (CDC) has stated that no safe blood lead level in children has been identified.

in 2018, the Trump Administration unveiled the *Federal Lead Action Plan (Lead Action Plan)* – a robust and coordinated federal effort – to reduce childhood lead exposure. The *Lead Action Plan* will help federal agencies work strategically and collaboratively to reduce exposure to lead and improve children's health.

EPA and our federal partners are committed to a collaborative approch to address this threat and improve health otucomes for our nation's most vulnerable population our children.




## President's Task Force

The President's Task Force on Environmental Health Risks and Safety Risks to Children, which was established in 1997 by Executive Order 13045, is the focal point for federal collaboration to promote and protect children's environmental health. The Task Force is currently co-chaired by Acting EPA Administrator Andrew

Wheeler and U.S. Health and Human Services (HHS) Secretary Alex Azar.

In February 2018, EPA convened a meeting of the Task Force – including HUD Secretary Ben Carson, Labor Secretary Alexander Acosta, and HHS Deputy Secretary Eric Hargan – to collaborate on the development and implementation of a new *Federal Strategy to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts.*

In December, the Task Force met its commitment to issue a new strategy. Acting EPA Administrator Wheeler was joined by HUD Secretary Ben Carson and HHS Deputy Secretary Eric Hargan to unveil the Trump Administration's *Federal Lead Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (Lead Action Plan).*

*Lead Action Plan*

**Goal 1:** Reduce Children's Exposure to Lead Sources
**Goal 2:** Identify Lead-Exposed Children and Improve Their Health Outcomes
**Goal 3:** Communicate More Effectively with Stakeholders
**Goal 4:** Support and Conduct Critical Reserach to Inform Efforts to Reduce Lead Expsures and Related Health Risks

**"The Trump administration's new Lead Action Plan reflects our strong commitment to preventing future generations from being affected by lead exposure. We know that lead exposure at a young age can result in serious effects on IQ, attention span, and academic achievement. We need to continue taking action to prevent these harmful effects. Identifying lead-exposed children, connecting them with appropriate services, and preventing other children from being exposed to lead are important public health priorities for this administration."**

**– HHS Secretary Alex Azar**

**"HUD is delighted to join the other members of the Task Force in issuing this cohesive Federal Lead Action Plan. Implementing this plan will help federal agencies, along with our state and local partners, advance efforts to remediate home health hazards and keep children safe from lead poisoning."**

**– HUD Secretary Ben Carson**

EPA is committed to developing an implementation plan by March 2019 that includes performance metrics for monitoring progress and demonstrating accountability for EPA activities identified in the *Lead Action Plan*. The Agency is also committed to providing periodic updates on the progress of these actions.

EPA and members of the Task Force will continue to engage with and reach out to community stakeholders such as non-governmental organizations.

Agency-Wide Lead Work Snapshot

- *National Lead Poisoning Prevention Week:* To commemorate National Lead Poisoning Prevention Week, EPA released "Protecting Children from Lead Exposures" to highlight some of the ongoing programs being worked on across the various program and regional offices. The Agency continues to aggressively address lead issues across America, working with communities and partners to further identify and eliminate lead exposure, especially for children who are most vulnerable to lead poisoning.

  **"Reducing lead exposure, particularly among children, is a top priority for EPA. We are in the process of completing several important actions to combat lead poisoning, such as publishing the new joint federal lead strategy, strengthening the dust-lead hazard standards, and overhauling the lead and copper rule for the first time in over two decades. We are releasing a new document, Protecting Children from Lead Exposures, that will increase public awareness of the EPA programs and grants available to reduce lead exposure."**

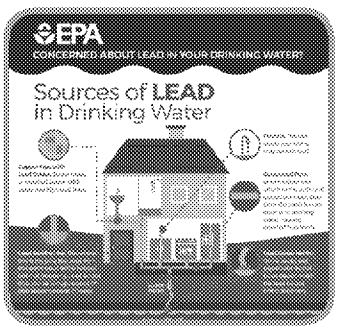
  **– EPA Acting Administrator Andrew Wheeler**

- *Lead and Copper Rule:* EPA is working to update the lead and copper rule for the first time in two decades.

- *Lead Dust:* EPA proposed strengthening the dust-lead hazard standards. The new, lower proposed

standards for lead in dust for floors and window sills will be an important step to reduce lead exposure – especially for children.

- *Water Infrastructure:* In 2018, the Water Infrastructure Finance and Innovation Act (WIFIA) program prioritized projects that reduce exposure to lead and other contaminants in drinking water systems and update the nation's aging infrastructure. While the Agency recognizes that it will be a multi-year process to bring in applications for lead projects under the WIFIA program, the agency is pleased that in 2017 the Indiana Finance Authority's loan application included $6 million dollars for two lead service line replacement projects in East Chicago and Crown Point. In 2018, EPA invited several entities to apply for WIFIA loans that would invest more than $300 million in lead-related projects. The agency looks forward to investing in more projects that will reduce lead in drinking water.




- *Grants:* EPA awarded nearly $4 Million in funding to Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Va., and the Water Research Foundation in Denver, Colo., to research strategies to detect and eliminate lead exposure in drinking water.

  1. Virginia Tech will use their grant of $1,981,500 to create a consumer-based framework to detect and control lead in drinking water. Researchers will work collaboratively with the public, encouraging citizen scientists to participate in the research. By involving consumers directly in research, this community science project is designed to increase public awareness of lead in water and plumbing at a national scale. This research expands the capacity of the most vulnerable communities to actively participate in identifying risks and evaluating opportunities to mitigate those risks.

  2. The Water Research Foundation's $1,981,500 grant will be used to create a risk-based model to identify opportunities to mitigate lead exposure from drinking water, including at homes and among children and pregnant women. In addition, they will develop a communication framework that focuses on education and outreach for risk factors and mitigation opportunities. The communication framework will be a resource for vulnerable communities and water utilities, as well as the general public and other stakeholders.

- *Region 3:* In FY 2018, the region designed and implemented a place-based approach to reduce exposure to lead, focusing on increasing awareness of and compliance with EPA's Lead Renovation, Repair, and Painting (RRP) Rule. Region 3 concentrated on outreach, compliance assistance, and inspection/enforcement resources for at-risk geographic areas, including Lancaster, PA and Philadelphia, PA. This pilot led to the development of a collaborative Federal regional initiative with Housing & Urban Development and Health & Human Services. Region 3 is applying lessons learned in Lancaster to apply this approach in the Philadelphia area and is partnering with federal, state, and local officials, such as the City of Philadelphia school board.

**"By educating the public about the dangers of lead paint and increasing awareness of lead paint rules, we can help reduce lead poisoning in children. "This initiative is a focused effort with our local counterparts to reduce lead exposure in Philadelphia, where there is a large amount of older housing stock with lead paint that has not been removed."**
**– EPA Mid-Atlantic Regional Administrator Cosmo Servidio**

In addition to performing inspections, this initiative includes workshops on EPA-accredited RRP training for city inspectors,and licensing/permitting employees. It also includes events and in-person visits with trusted organizations, such as childcare centers and paint suppliers. Together, the Lancaster project and the Philadelphia project constitute a model to apply to the Regional Geographic Initiative on Lead.

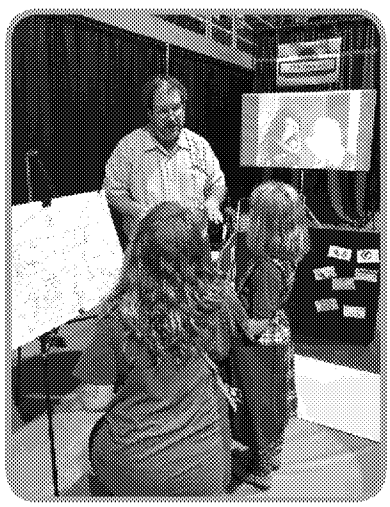
- *Region 7:* In St. Joseph, Missouri, a historic city on the Missouri River, 15 percent of children tested from 2010-2015 had elevated blood-lead levels – more than three times the national average. In order to combat this public health issue, Region 7 created a regional lead task force working with the city, as well as federal partners. The task force is focused on public education to parents, health care providers, and renovators/DIYers who may deal with lead-based paint. As part of this initiative, Region 7 established collaborative relationships and networks with St. Joseph's Health Department, Missouri Department of Health and Senior Services, two hospitals, community groups, and others. To date, the team has engaged more than 25,000 people in the community. In December, St. Joseph Mayor Bill McMurray publicly recognized and thanked EPA for its efforts.

Engagement events are reaching individual families with small children, daycare centers, the regulated community, and more. Activities included a variety of outreach, compliance assistance, and enforcement activities such as:

- Conducting lead-safe certified program training for commercial renovators as well as compliance inspections;
- Working with area home improvement stores to share lead safety information and demonstrate lead-safe practices for do-it-yourself home renovators;
- Visiting daycare facilities, including home daycares, to teach children and parents how to reduce exposure to lead-paint dust;
- Engaging with local community groups to determine how to best share resources and training opportunities with their members;
- And coordinating lead safety media coverage and radio public service announcements.

EPA Region 7 participate in the Southside Fall Festival Parade in St. Joseph, Missouri

As part of the St. Joseph, Missouri, Geographic Initiative, four EPA team members participated in the annual Tiny Tot Town Event in St. Joseph, Missouri, on October 9, 2018. This event created an interactive simulated community to introduce children to life in their town. Children explored Tiny Tot Town by strolling the streets, meeting with store owners, bankers, librarians, and other professionals in the community. The EPA team set up a booth that highlighted how to avoid lead exposure and educated children and parents about easy steps they can take to stay lead-free. They also passed out handbooks for parents and coloring books for children. Approximately 300 people stopped by the EPA booth to learn about living lead-free. EPA staff also participated in the Southside Fall Festival Parade – with approximately 1,000 people in attendance – and distributed lead poisoning awareness and prevention materials to educate the community on how to reduce children's lead exposures.



EPA Region 7 discusses the importance of lead safety at the Tiny Town event in St. Joseph, Missouri

# AGENCY REFORM

## Lean Management

Under President Trump, EPA launched a comprehensive management system, the EPA Lean Management System (ELMS), to identify, track, and improve critical Agency processes.

This past year, we initiated deployment of ELMS in three regions and scheduled deployment in the rest of the agency for FY 2019. We also created over 600 performance measures across all national programs and regional offices. For the first time, EPA is reviewing its performance via these new measures and taking corrective action on a monthly, rather annual basis.

In FY 2018, EPA made positive improvements on 46 percent of its performance goals as reported through ELMS.

Through the deployment of ELMS, EPA has:

- Reduced its backlog of new permit applications older than six months by 34 percent between June and November 2018.
- Increased the percentage of TSCA pre-manufacture notice final determinations completed within 90 days of submission from 11 percent in October 2017 to 71 percent in September 2018.
- Increased the annual number of Brownfields properties made ready for anticipated use from 531 in FY 2017 to 861 in FY 2018.
- Decreased the backlog of action on Total Maximum Daily Loads to support meeting water quality standards under the Clean Water Act from 219 in April 2018 to 95 in October 2018.

## Agency Structure

*Environmental Justice:* In 2018, EPA completed organizational changes that included moving the Office of Environmental Justice (OEJ) and the Office of Federal Activities into EPA's Office of Policy, located in the Administrator's Office. By elevating the work of these organizations, EPA can better address the Agency's most pressing priorities, namely addressing the needs of vulnerable groups and communities and expediting federal infrastructure reviews and environmental permitting decisions. In particular this will allow the Agency to incorporate environmental justice into all EPA programs, not just enforcement actions.

*Permitting:* In the newly located Office of Federal Activities, EPA worked to streamline its permitting activities and improve its obligations related to the National Environmental Policy Act (NEPA). In October 2018, EPA rescinded an outdated, unhelpful, and duplicative alphanumeric rating system used in the NEPA comment letters the Agency issues on draft environmental impact statements (EISs). The Agency started a review of its 1984 NEPA policy and procedures to identify other opportunities for reform.

Moreover, for the first time ever, EPA started tracking the percentage of EPA's NEPA comment letters that issue within the 45-day comment period. EPA issued comment letters within that period nearly 100% of the time in FY 2018. EPA also started tracking its early engagement with other federal agencies in the NEPA process and worked to increase this engagement throughout FY 2018.

EPA released its implementation plan for the One Federal Decision policy for major infrastructure projects established in President Trump's EO 13807. EPA's plan includes actions to streamline permitting-related decisions and reduce EPA's review of draft EISs. Notably, by the end of FY 2019, EPA committed to reduce the number of permit-related decisions exceeding six months by 50 percent and by September 30, 2022, all permit-related decisions will be made in six months.

*FOIA:* EPA is improving the efficiency, accuracy, and timeliness with which it responds to the thousands of Freedom of Information Act (FOIA) requests it receives annually. EPA took a major step toward this goal in 2018 when it created the National FOIA Office (NFO) within the Office of General Counsel (OGC). NFO aims to standardize policies, streamline procedures, and increase effectiveness and visibility in order to respond to FOIA requests efficiently and in a timely manner.

*Mission Support:* The Agency also created the Office of Mission Support by combining the Office of Administration and Resources Management and the Office of Environmental Information to align EPA's core mission support functions, and to improve efficiency, coordination, and customer experience for internal customers, stakeholders, and the public.

## Cost-Benefit Reform

EPA owes it to the American people to be consistent and transparent about how it makes regulatory decisions. Many federal environmental statutes, such as the Clean Air Act and the Clean Water Act, require or allow some consideration of cost and benefits when setting pollution standards, but there is variation in terminology and specificity provided in each law regarding the nature and scope of the cost and benefit considerations.

To improve consistency and transparency, the Agency engaged with the American public to consider the most effective way to formalize the Agency's approach to weighing costs and benefits in future decisions. In June 2018, EPA issued an Advance Notice of Proposed Rulemaking (ANPRM) asking for public input on how EPA can improve consistency and transparency in considering costs and benefits and on the potential for issuing regulations to govern EPA's approach in future rulemakings.

**WSJ Editorial Board: June 6, 2018**

"Barack Obama's Environmental Protection Agency jammed through an average of 565 new rules each year during the Obama Presidency, imposing the highest regulatory costs of any agency. It pulled off this regulatory spree in part by gaming cost-benefit analysis to downplay the consequences of its major environmental rules. The Trump Administration has already rolled back some of this overregulation, and now [the Agency] wants to stop the EPA's numerical shenanigans, too.

On Thursday the EPA will take the first step toward a comprehensive cost-benefit reform by issuing an advance notice of proposed rule-making. After weighing public input, EPA will propose a rule establishing an agency-wide standard for how regulations are assessed. The reform would make it easier for Americans and their elected representatives to see whether more regulation is truly justifiable...

The regulatory specifics will be hashed out in the coming months, but there's real potential here to curb the distortions that mask bad policy. If [EPA] succeeds, future cost-benefit analyses will be more consistent and transparent. The reform would help to ensure regulation is based on sound scientific analysis instead of wishful bureaucratic thinking."

## Smart Sectors

EPA's Smart Sectors program provides a platform to collaborate with regulated sectors and develop sensible approaches that better protect the environment and public health. The goals include: meaningful collaboration with regulated sectors; common-sense policies to improve environmental outcomes; and better EPA practices and streamlined operations.

In its first year, EPA established partnerships with 13 sectors of the economy; held three Administrator roundtables with all sectors; visited 18 facilities covering the operations of nine different sectors; and held more than 500 other internal and external meetings to better understand and help address sector issues and opportunities.

Other achievements include:

- "Best practices in permitting" video, profile, and story map to support an Agency goal of making all permit decisions within six months by 2022;
- "Sector Snapshots:" an interactive, web-based application that provides environmental and economic data over the last 20 years about industries participating in the program;
- Agreement with the National Association of Manufacturers to expand the reach of Smart Sectors into the broader manufacturing sector; and
- Extension of an agreement with the National Vehicle Mercury Switch Recovery Program to prevent the release of mercury into the environment.

Additionally, EPA Regions 1 and 8 launched Smart Sectors initiatives to improve communication with specific industries important to their regional economy, environment, and public health.

**"The Smart Sectors program has been a game changer for our dialogue with EPA on pragmatic and effective environmental protections. The cement industry is committed to finding creative ways to reduce our environmental footprint while continuing to provide a resilient and cost-effective building material to support our nation's infrastructure needs."**

**Portland Cement Association President & CEO Mike Ireland**

# EPA ACROSS the COUNTRY

# REGION 1: New England

## BY THE NUMBERS

**3** Superfund sites deleted from the NPL (Hatheway & Patterson in Mansfield, Massachusetts; Old Southington Landfill in Southington, Connecticut; and Union Chemical Co., Inc. in South Hope, Maine).

**34** State Implementation Plans approved.

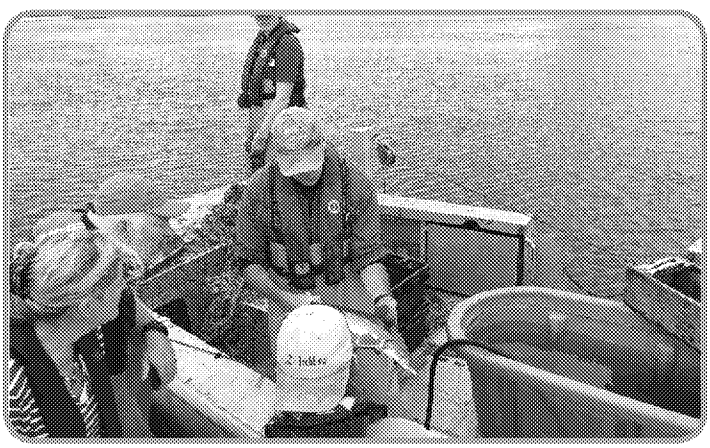
**400** New England residents in attendance at the first-in-the-country, two-day PFAS community engagement meeting in Exeter, NH.

**701** doors knocked on by the Community Involvement team in addition to the 84 public meetings and 40 factsheets to disseminate information to the public on Superfund and emergency removal sites.

### Region 1 Firsts

- Region 1 finalized the Massachusetts and New Hampshire MS4 permits and put them both into effect. The new permits update stormwater management efforts across both states' urbanized areas that will better protect rivers, streams, ponds, lakes, and wetlands from harmful pollutants in many communities. While updating ecological protection, the permits also maximizes flexibility for individual municipalities to tailor their efforts to individual needs and local conditions.
- Region 1 worked with the Commonwealth of Massachusetts to develop their first-ever "watershed permit" to holistically address nitrogen sources on Cape Cod for the four towns sharing the Pleasant Bay watershed: Brewster, Chatham, Harwich, and Orleans. The permit represents an innovative and flexible permitting approach to support Cape Cod communities' efforts to address the critical water quality challenges stemming from nitrogen contamination of the Cape's waterways.
- Working with the State of Vermont to implement the Lake Champlain cleanup, EPA issued the first-ever report card for Lake Champlain, which showed a commitment to implementing the phosphorus Total Maximum Daily Load (TMDL) for Lake Champlain and establishing a strong framework to support future phosphorus load reductions.

New England Regional Administrator Alex Dunn and the Mashpee Wampanoag Tribe on Cape Cod discussing work to reduce nitrogen levels in Cape Cod Bay through oyster aquaculture using EPA grant funding



EPA scientists water sampling the Lower Connecticut River through tracking sturgeon

# REGION 2: New Jersey, New York, Puerto Rico & U.S. Virgin Islands

## BY THE NUMBERS

**169** Public water system examinations in New York State (114) and New Jersey (55) to ensure the Lead and Copper Rule is adequately implemented and drinking water is protected.

**$74 Million** Cleanup plan – with strong community support – for the American Cyanamid Superfund Site in Bridgewater Township, New Jersey to address two waste lagoons containing highly toxic acid tar, benzene, and other chemicals.

**$307 Million** Grant funding for New York and New Jersey for water infrastructure improvements.

**$332 Million** cleanup at Berry's Creek (Ventron/Velsicol Superfund Site) in Bergen County, New Jersey – an action North Jersey Editorial Board called "Long Overdue" – focused on controlling the greatest sources of contamination to the watershed.

### Community Drinking Water Systems in Puerto Rico

In September 2018, EPA signed a Memorandum of Understanding with seven non-government entities (Por Los Nuestros, Water Mission International, the Puerto Rico Science, Technology and Research Trust, the Puerto Rico Community Foundation, the American Red Cross, OXFAM, and Polytechnic University of Puerto Rico) to strengthen the development and operation of independent public water systems and unregulated community water systems in Puerto Rico.

These public water systems are in remote, rural areas of the island, relying on surface water and/or groundwater for their water supply and facing unique challenges in providing affordable drinking water and wastewater services that meet federal and Commonwealth regulations. Many of these systems lack the technical, managerial, and financial capabilities and resources necessary to assure access to reliable and safe drinking water even before Hurricanes Maria and Irma hit the island last year, and those problems have only been exacerbated by the impact of the storms.

The MOU leverages more than $10 million pledged by the nonprofit groups to support the organizations that own and operate water systems and make their systems more energy independent. Through this MOU, EPA and the other signatories have agreed to use our resources and expertise to collectively build capacity to ensure the systems provide safe drinking water to community residents, as well as conduct infrastructure repairs and improvements to make these systems more sustainable and resilient to future extreme weather events.

*EPA Regional Administrator Pete Lopez with the Mayor of Aguas Buenas, Javier García; Dr. Nelson Colón from the Fundación Comunitaria de Puerto Rico; Community Leader Don Guillermo Falcón; and EPA staff*

### Clean Drinking Water

EPA Region 2 reached an agreement with the town of Ticonderoga, New York, a town with a per capita income of $16,000 and 21% of children living in poverty, to address longstanding violations of the Safe Drinking Water Act (SDWA) to protect the health of approximately 5,000 village residents. The Consent Decree establishes requirements and a schedule to bring the town into compliance, including monitoring and public notification. As part of the agreement, the Town will perform $100,000 in Supplemental Environmental Projects, consisting of a notification project and a pharmaceutical disposal project.

# REGION 3: Mid-Atlantic

## BY THE NUMBERS

**4** Superfund sites deleted from the NPL (Dorney Road Landfill in Upper Macungie Township, Pennsylvania; C & D Recycling in Foster Township, Pennsylvania; Ordnance Works Disposal Areas in Morgantown, West Virginia; and Recticon/Allied Steel Corp. in East Coventry Township, Pennsylvania).

**38** Completed federally approved actions on State Implementation Plans.

**165** Residential properties cleaned up to address contamination from polycyclic aromatic hydrocarbons and metals in the Eastwick Neighborhood in proximity to the Lower Darby Creek Area Superfund Site.

**4,757** Lab analyses performed for 40 Superfund sites by Region 3's Environmental Science Center Regional Laboratory. The Regional Laboratory also obtained new ISO Accreditation for PFAS Method 537, becoming the first EPA laboratory with this accreditation for drinking water.

**$263 Million** Awarded in state revolving loan grants to state partners in the Mid-Atlantic, which will be used to address the critical need for improved infrastructure.

### Chesapeake Bay Progress

In July 2018, EPA and the Bay Program Partnership completed the Bay TMDL "Midpoint Assessment" which updated the Partnership's modeling tools with new science, land use and land cover data, and improvements to its accuracy and completeness. It also included an EPA evaluation of the progress the partners have made toward meeting the goals of the Chesapeake Bay TMDL. According to the assessment, the partnership exceeded its halfway goal for reducing phosphorus and sediment as measured under the current suite of modeling tools. The report detailed **record acreage of underwater grasses** and the **highest estimates of water quality standards attained in more than 30 years.** Overall watershed-wide restoration efforts exceeded the 60 percent goals for reducing phosphorous and sediment with support from EPA.

EPA Mid-Atlantic Regional Administrator Cosmo Servidio signed a memorandum of understanding (MOU) with Lincoln Univeristy to enhance research, teaching, outreach, career development, and stewardship in environmental sciences. The MOU is part of EPA's Minority Academic Institutions Program which was created to increase opportunities for Minority Academic Institutions to participate in federal programs.

Region 3 Agriculture Outreach

# REGION 4: Southeast

## BY THE NUMBERS

**127** Superfund sites assessed following Hurricanes Florence and Michael.

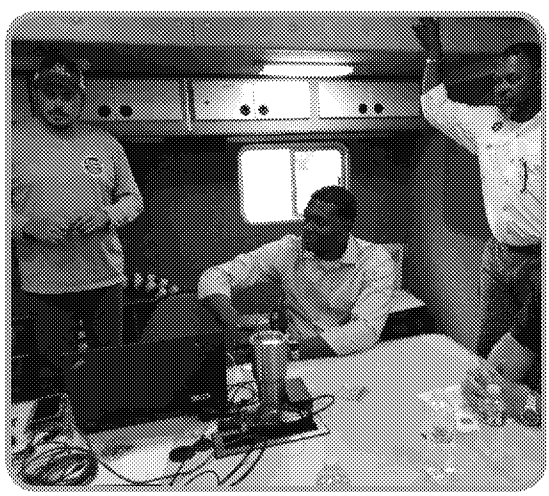
**1.45 Million** People in the Troy and Hillsborough area with clean air after the redesignation of remaining two nonattainment areas for 2008 lead NAAQS.

**$2 Million** Grant funding for two projects in the Farmer to Farmer Cooperative Agreement to improve water quality, habitate, and environmental education in the Mississippi River Basin.

**500 Million** Gallons of contaminated wastewater stored at the Mississippi Phosphates Corporation site in Pascagoula eliminated by the innovative $71.6 million cleanup that will take place between 2018-2020 in addition to reducing the volume of wastewater requiring treatment by an estimated 98 percent.

### EPA and Partners Respond to Hurricanes Florence and Michael

In September 2018, Hurricane Florence caused significant damage and widespread flooding in the Carolinas. Directly following, in October 2018, Hurricane Michael struck the Gulf Coast; it was the most powerful hurricane to ever hit northwest Florida. Prior to the storms landing, EPA activated emergency response centers and worked with federal, state, tribal, and local partners in North Carolina, South Carolina, and Florida to ensure that Superfund sites were secured, developed plans to assist in rapidly assessing public water systems, and processed emergency fuel waivers.



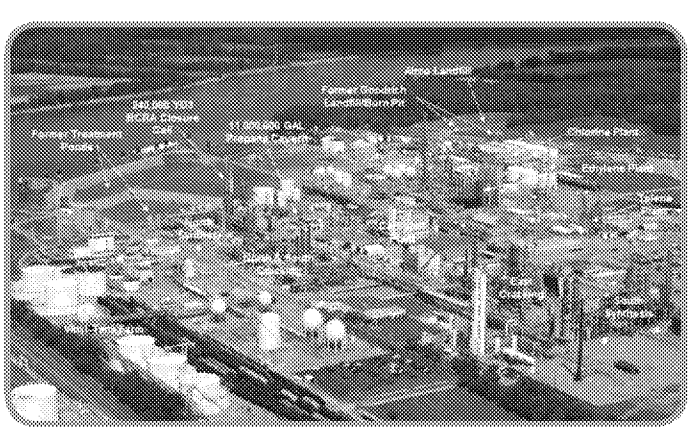
EPA Region 4 response team meet at the North Carolina Incident Command Post in Fayetteville, North Carolina following Hurricane Florence

Following landfall, EPA coordinated closely with local, tribal, state, and federal partners in responding to the hurricanes' impact. Region 4 had more than 40 personnel involved in emergency response efforts. Region 4 Superfund's On-Scene Coordinators (OSCs) and Region 4 Water Protection Division's water/wastewater technical experts deployed to State Emergency Operation Centers and to the Federal Emergency Management Agency (FEMA) Regional Response Coordination Center in Atlanta to assist with emergency support functions for oil and hazardous substance response efforts and water/wastewater infrastructure assessment and recovery. EPA provided asbestos technical and regulatory assistance to Florida and North Carolina as they supported local property owners' and contractors' recovery efforts. Region 4 staff remain on the ground in Florida, assisting the State with recovery efforts.

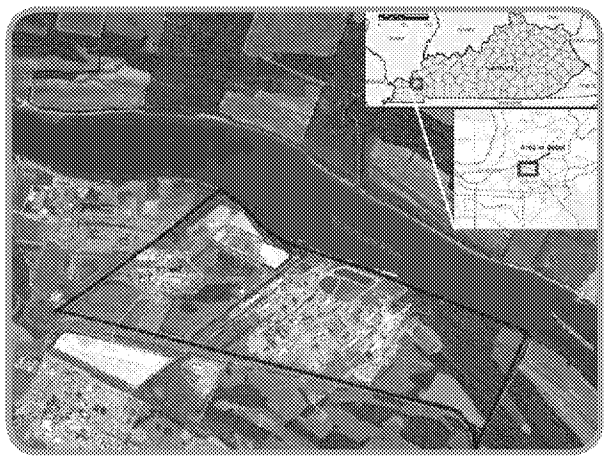
Region 4 deployment included EPA's Mobile Command Post, a mobile laboratory, emergency response vehicles, satellite communications equipment, air monitoring instruments, and other assorted field equipment. During the recovery phase of the responses to the hurricanes, Region 4 Superfund coordinated post-landfall assessments of NPL and NPL-caliber Superfund sites potentially impacted by the storm. Region 4 Superfund's assessment teams conducted inspections at 127 NPL sites.

## Superfund Progress

After a multi-year journey, the B.F. Goodrich Superfund site achieved a major milestone in advancing the cleanup. In September 2018, EPA Acting Administrator Andrew Wheeler signed a second ROD selecting the final remedy for the site, which is in Calvert City, Kentucky.
The $107 million remedy includes a three-mile sub-surface barrier wall around onshore contamination, groundwater collection and treatment, recovery of non-aqueous phase liquid (NAPL) from accessible onshore areas, dredging of contaminated sediments from the barge slip, closure of two ponds, recovery of NAPL from beneath the Tennessee River, and treatment of the groundwater plume beneath the river. The remedy is widely supported by all stakeholders. It replaces an initial cleanup plan that was more than twice as expensive, disruptive to ongoing chemical plant operations and posed health risks during construction.



Region 4 Superfund also pursued an innovative approach to the site's remedial design and remedial action process, separating the two activities. Region 4 staff had enforcement documents ready for issuance to site PRPs to negotiate an agreement to conduct the remedial design shortly after the ROD was signed.



Map of B.F. Goodrich Superfund site in Kentucky

## Innovative Settlement Agreement to Protect Workers and a Community

On June 12, 2018, Region 4 reached a settlement agreement with Decostar Industries, Inc. (Decostar) to control levels of hazardous air emissions from their facility in Carrollton, GA., to protect workers and the surrounding community. Twenty-seven different Resource Conservation and Recovery Act (RCRA) violations were observed during an inspection of the facility, the most significant of which included releases and leaks of volatile organic compounds (VOCs) into an area of the facility open to all employees where no respiratory protections were in place. One of the releases measured in excess of 20,000 parts per million (ppm), which was approaching the lower explosive limit of solvent in use.

As part of the settlement, Decostar will implement a leak detection and repair program, perform a supplemental environmental project valued at over $2.7 million and pay a $377,900 civil penalty. In addition, Decostar will implement a Supplemental Environmental Project (SEP). The SEP includes the replacement of existing robots and paint applicators with devices that increase transfer efficiency. This project is expected to reduce hazardous waste generated at the facility by 4,130 pounds per year, hazardous air pollution emissions by 1,385 pounds per year and emissions of volatile organic compounds by 1,972 pounds per year.

# REGION 5: Great Lakes

## BY THE NUMBERS

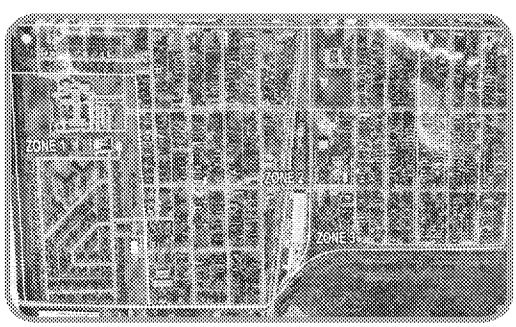
**53,000** Tons of PCB-contaminated soils/sediments and 2 million gallons of wastewater disposed of during the cleanup of the Ostego Township Dam Area of the Kalamazoo River at the Allied Paper Inc./Kalamazoo River Superfund site.

**575,000** Cubic yards of PCB-contaminated sediment removed by three hydraulic dredges operating 24 hours per day at least five days a week in the 15th year of cleanup work at the Fox River site.

**$100 Million** Invested in restoring Great Lakes Areas of Concern (AOCs) bringing significant economic benefits to local communities. In 2018, the Great Lakes program removed seven Beneficial Use Impairments at seven AOCs in five states, allowing for greater recreational fishing, swimming, and boating opportunities and economic development.

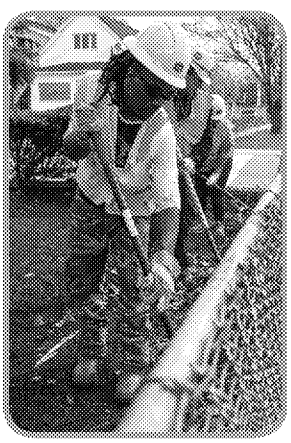
### Expedited Response at the USS Lead Superfund Site in East Chicago, Indiana

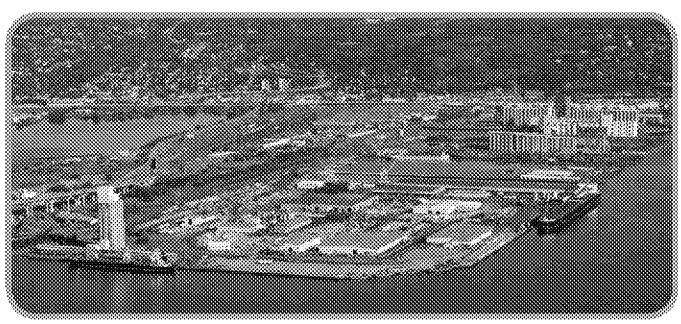
In 2018, Region 5 successfully met – and even exceeded – goals for completion of soil cleanup at residences in both Zones 2 and 3. Work included removing 24,995 tons of lead- and/or arsenic-contaminated soil from 178 Zone 2 properties and 19,561 tons of lead- and/or arsenic-contaminated soil from 120 Zone 3 properties. In the past two years, EPA has removed 76,851 tons of soil contaminated with lead and arsenic from 527 homes and yards in two of the site's three cleanup areas (Zones 2 and 3). EPA held six public meetings throughout 2018 in addition to other on-the-ground public engagement efforts, such as Region 5 presence at Calumet Days and door-to-door recruitment for blood lead testing. A community outreach office at the former Carrie Gosch Elementary School was also established where EPA staff is available throughout the workweek.




### Significant Brownfields Redevelopment

Region 5 assessed 670 Brownfields sites (35 percent of EPA total) and cleaned up 25 Brownfields sites (17.5 percent of EPA total). The region leveraged $546 million in Brownfields cleanup and redevelopment projects (25 percent of EPA total), and readied 261 new Brownfields properties for reuse (30 percent of EPA total). These projects resulted in approximately 3,800 new jobs from Brownfields redevelopment (35 percent of EPA total).



Duluth Seaway Port Authority in Minnesota received a $300,000 Brownfields grant to assess, clean up, and redevelop underutilized properties while protecting public health and the environment specifically around Rice Point, Lincoln Park, Morgan Park, and Gary-New Duluth neighborhoods in Duluth, Minnesota

# REGION 6: Arkansas, Louisiana, New Mexico, Oklahoma & Texas

## BY THE NUMBERS

**54** Acres of the remediated Bayou Bonfouca Superfund site which is now home to municipal services departments, Heritage Park, public boat launch, and a state of the art marina recognized for excellence in reuse.

**$35,000** Settlement with CertainTeed to resolve alleged violations of the Safe Drinking Water Act (SDWA) in Westlake, Louisiana. It represents the largest civil penalty payment under the SDWA by a public water system with respect to drinking water in the state of Louisiana.

**$600,000** Civil penalties resulting from settlement with Georgia-Pacific of alleged violations of the Clean Air Act in Crossett, Arkansas where the company will take steps to correct the violations and implement a mitigation project to reduce hydrogen sulfide (H2S) emissions.

**$3.1 Million** Civil penalties paid by DuPont due to a Stipulation of Settlement to address alleged chemical accident prevention violations at its former La Porte, Texas chemical manufacturing facility.

**$115 Million** Record of Decision signed to cleanup the San Jacinto Waste Pits Superfund site after responding to more than 48,000 comments.

### Partnering with States and Tribes on Illinois River Watershed Models

In April, Region 6 completed the Illinois River Watershed Basin and Lake Tenkiller models and released them to the partnering agencies for use. The EPA partnered with Arkansas, Oklahoma, and the Cherokee Nation to develop science-based water quality models. Partner agencies can now use the models to evaluate options as they continue to reduce phosphorus loadings from sources in northeast Oklahoma and northwest Arkansas.

- *Tulsa World*: "Long-awaited rules mean Arkansas and Oklahoma agencies will operate off same page"
- *Tahlequah Daily Press*: "After partnering with the states of Arkansas and Oklahoma and the Cherokee Nation to develop science-based water quality models, the U.S. Environmental Protection Agency has completed the Illinois River Watershed Basin and Lake Tenkiller models and released them to the partnering agencies for us."

### Working with Federal and State Partners to Bring New Drinking Water Source to North Texas

The Lower Bois d'Arc Creek Reservoir project, as proposed by the North Texas Municipal Water District, will create a water supply reservoir to provide drinking water to cities north and east of Dallas, Texas. As a cooperating agency, EPA worked with the U.S. Army Corps of Engineers and other stakeholders to address issues with the proposed project, which will impact more than 6,000 acres of wetlands and more than 120 miles of streams. Total mitigation efforts will provide compensation with 9,131 wetlands acres and 74.3 miles of streams. The North Texas Municipal Water District serves one of the fastest-growing urban areas in the country. The Lower Bois d'Arc Creek reservoir will provide drinking water supply infrastructure for this growing population by 2022. When finished, the reservoir will yield an estimated 175,000 acre feet of drinking water per year for North Texas consumers.

### MOU on Produced Water with New Mexico

EPA and the State of New Mexico released a draft whitepaper which addresses state and federal regulatory management of produced water, along with opportunities to treat and reuse the water to help alleviate water scarcity issues across the state. The whitepaper was released following the July 2018 Memorandum of Understanding entered by EPA, the New Mexico Energy, Minerals and Natural Resources Department (EMNRD); Environment Department; and the Office of the State Engineer to assess and clarify the existing regulatory landscape related to the way produced water from oil and gas extraction activities may be reused, or, as appropriate, treated and made available for non-oil and gas applications in New Mexico.

# REGION 7: Kansas, Iowa, Missouri & Nebraska

## BY THE NUMBERS

**101** Residential properties cleaned up in the Omaha Lead Superfund site formally deleted from the NPL.

**$47.7 Million** Water Infrastructure Finance and Innovation Act (WIFIA) loan to the Metropolitan St. Louis Sewer District in Missouri to help finance its Deer Creek Sanitary Tunnel and Sanitary Relief project. This upgrade will help alleviate wastewater overflow and reduce basement backups for the 1.4 million residents served by Metropolitan St. Louis Sewer District and improve water quality in Deer Creek. Because the WIFIA program offers loans with low interest rates, the Sewer District is expected to save up to an estimated $15 million compared to typical bond issuance. Project construction and operations are expected to create 70 jobs, with construction beginning in 2019 and a target completion date in late 2023.

**$69.7 Million** WIFIA funding for the City of Omaha, Nebraska to help finance its Saddle Creek Retention Treatment Basin, which will decrease the number and volume of overflow events into Little Papillion Creek, a Missouri River tributary, from 58 to 5 times a year and 560 to 70 million gallons per year; reduce the volume of untreated combined sewer overflow, total suspended solids, and E. coli bacteria entering the creek; and save the City of Omaha about $20 million in interest costs by utilizing WIFIA financing for this project.

### West Lake Landfill Record of Decision Bridgeton, Missouri

In 2018, EPA finalized a remedy for Operable Unit (OU) 1 of the West Lake Superfund Site in Bridgeton, Missouri – a target milestone on the Administrator's Emphasis List. After consideration of the 4,200 public comments received, the finalized Record of Decision (ROD) Amendment and Responsiveness Summary selects a remedy that includes excavation and offsite disposal of a large portion of the radioactive materials at the Site, followed by installation of an engineered containment system.

Acting Administrator Wheeler signs the West Lake ROD with Missouri Senator Roy Blunt and Congresswoman Anne Wagner

Simultaneously, the Region started negotiations with the potentially responsible parties (PRPs) to perform a remedial investigation and feasibility study for groundwater at the Site which is part of a separate operable unit (OU 3).

### Improving Enforcement Timeliness thru Lean Management

Region 7's Clean Air Act 112® Risk Management Program enforcement team has significantly reduced the time it takes to complete both expedited and administrative enforcement actions. The enforcement team is now completing these actions faster, which helps bring facilities in compliance at a faster pace. The average time to complete cases has dropped from 503 days for expedited enforcement actions and 862 days for administrative enforcement actions in FY15, to 226 and 495 days in FY18. That is a 55 percent and 42 percent reduction respectively.

The team is also tracking the time it takes for facilities to come back into compliance, regardless of what stage they are in the enforcement process. Thanks to this effort there has been a 33 percent (administrative) and 23 percent (expedited settlement agreement) reduction in the time it takes a facility to come back into compliance.

# REGION 8: Mountains & Plains

## BY THE NUMBERS

**$12 Million** Additional funds to significantly accelerate the cleanup of residential soils and indoor dust at the Colorado Smelter Superfund site in Pueblo, Colorado from over a decade to 3 to 5 years.

**303 (c) and 401** Approved Treatment in a Similar Manner applications for the Southern Ute Indian Tribe for the Clean Water Act (CWA) Section 303(c) Water Quality Standards and 401 Certification programs for all currently held tribal trust lands.

**989** Inspections conducted in Indian Country, accounting for 47 percent of all inspections in Region 8.

**2,869,000** People reached with lead poisoning prevention public service announcements in addition to providing over 5,000 lead poisoning prevention hard-copy publications..

### Silver Bow Creek / Butte Superfund Site and Anaconda Super Superfund Site

After several meetings, EPA Region 8 reached conceptual agreement in July 2018, with PRPs, the state, and the county for future cleanup work at the Anaconda site and reached a conceptual agreement in January 2018, with Potentially Responsible Parties (PRP), the state, and the county for future cleanup work at the site and the Silver Bow Creek/Butte site. Agreements in both Butte and Anaconda are significant steps in the process to achieve the goal of completing cleanup and beginning deletion of the Butte Site by the end of 2024 and the Anaconda site by the end of 2025. Both sites were listed on the NPL in the early- to mid-1980s – well over 30 years ago. EPA intends to begin the deletion process in 2019 by partially deleting two operable units at the Anaconda site. At both sites, the State of Montana, as well as the locally elected officials, deserve significant credit for reaching an agreement. The PRP at both sites, Atlantic Richfield, also engaged productively in negotiations and allowed us to reach a settlement. Finally, citizen organizations in both communities, while not engaged in direct negotiations, provided valuable constructive criticism throughout the process.

**Anaconda:** The Anaconda agreement is comprehensive and includes finalizing the cleanup of the community as well as an economic development funding. We are currently in the process of working on the details of the agreement and the consent decree. The court has lifted the confidentiality order and we are also working with local elected officials on a plan to seek community input into the agreement.

**Butte:** The Agreement and eventual settlement/ consent decree will benefit the community of Butte by implementing a comprehensive cleanup that includes amenities that incorporate the interests of the community for a park with water features in upper Silver Bow Creek after removal of mine wastes and construction of stormwater control features. Input from the community – Restore Our Creek Coalition, in particular – was critical to reaching a solution that would be supported by the public.

### Wyoming Self-Audit Initiative Memorandum of Understanding

EPA and the State of Wyoming entered into a Memorandum of Agreement (MOA) to encourage greater compliance with federal and state laws to protect human health and the environment by promoting self-policing in the regulated community. Specifically, the MOA provides Wyoming and the regulated community with greater certainty regarding environmental compliance self-audits conducted under Wyoming's environmental self-audit law and increases coordination between the state and the EPA. It clarifies EPA's oversight in Wyoming's implementation of its environmental privilege and immunity statue. The MOA reflects the Agency's renewed emphasis on encouraging regulated entities to voluntarily discover, promptly disclose, expeditiously correct, and take steps to prevent recurrence of environmental violations.

# REGION 9: Pacific Southwest

## BY THE NUMBERS

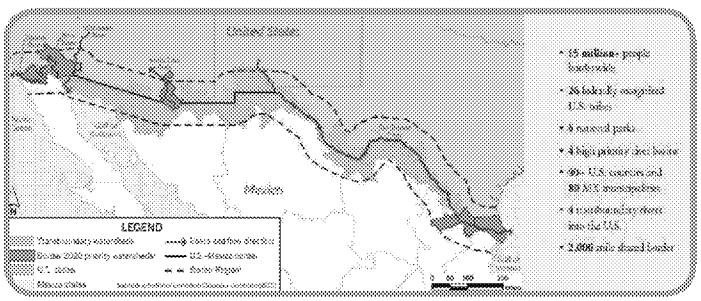
**31** Number of small drinking water systems serving 10,000 people or fewer returned to compliance after arsenic exceedances. Region 9 also reduced the number of systems exceeding lead action levels from 44 to six and facilitated lead sampling at 100 tribal schools and daycare facilities.

**$23 Million** Total awarded in Diesel Emissions Reduction Act (DERA) and Targeted Airshed Grants, leveraging more than $82 million to replace 550 diesel engines, which will reduce particulate matter by 170 tons and NOx by 2,000 tons – especially in the Los Angeles region and San Joaquin Valley – and improve air quality.

**$165 Million** Funding for wastewater and stormwater projects, $153 million for projects to improve availability and access to safe drinking water, and over $19 million to tribes to help address the increasing demand to build and improve water infrastructure across Region 9 states and territories.

### Environmental Protection at the Southwest U.S.-Mexico Border

In the past year, the Trump Administration has strengthened relationships with Mexico to protect the Southwest U.S. Mexico border. Region 9 took steps toward reducing the public health impacts of transboundary sewage flows and ultimately eliminating them.




- EPA worked with Mexican counterparts to develop a spill notification protocol to reduce health risks during sewage flows from Mexico to the U.S. The protocol was effectively implemented for the first time during a Tijuana spill in late 2018. It allowed Region 9 to immediately offer technical assistance to Mexico for the repair of its collector systems, which reduced the volume of the spill.
- Region 9 convened federal, state, and local governments, as well as representatives of NGOs and industry, to identify technical and financial solutions to transboundary pollution issues.
- For the first time, in coordination with the International Boundary and Water Commission, a plan for infrastructure investments to stop sewage flows was authorized for development by the North American Development Bank and Border Environment Cooperation Commission.

### Tribal Environmental Protection

Region 9 includes 148 federally recognized tribes. In Fiscal Year 2018, Region 9 awarded 111 grants totaling $15.8 million under the Indian General Assistance Program Act.

Among other accomplishments:

- 88 tribes have completed EPA-Tribal environmental plans;
- 50 tribal communities reduced environmental health stressors by cleaning up more than 30 open dumps;
- 19 e-waste, hazardous waste, tires and debris cleanups hosted by tribes;
- 13 Integrated Solid Waste Management plans drafted or revised; and
- Tribes in Region 9 completed drought contingency plans, updated or drafted new codes and ordinances, and conducted community outreach to spur behavioral change.

### Agricultural Worker Protection

Region 9 conducted Worker Protection Standards outreach for states, tribes, territories, farmworker, community, and industry groups. These efforts included seven workshops and three outreach events which trained 106 promotores, with the potential to reach 6,950 workers and their families; five events that reached 480 industry representatives; and training for 20 tribal employees and inspectors.

# REGION 10: Pacific Northwest

## BY THE NUMBERS

**250** Pounds of debris that contained asbestos collected in close coordination with the Oregon Department of Environmental Quality over a 3-square mile area on the banks of the Willamette River in Portland, Oregon in response to a warehouse fire in the largest Region 10 emergency response.

**340,000** Tons of debris and hazardous materials excavated and removed from the six-acre Bremerton Landfill Gorst Creek preventing further downstream toxic pollution from moving downstream, and protecting water quality for the Suquamish Tribe, fish and other wildlife thorough collaboration with the U.S. Navy, Suquamish Tribe, Washington Department of Fish and Wildlife, Kitsap County and Kitsap Public Health District.

**$135 Million** First-ever WIFIA loan to King County, Washington to help finance the Georgetown Wet Weather Treatment Station, which will collect and treat up to 70 million gallons of wastewater and stormwater per day that would have spilled into the Duwamish river during bad weather. The project is expected to create an estimated 1,400 jobs and will provide education, job training, and apprenticeship opportunities during its design, construction, and operation through King County's Priority Hire program and partnership with South Seattle College's Georgetown Campus.

### Idaho's Pollutant Discharge Elimination System

Throughout 2018, the National Pollutant Discharge Elimination System Permits Team completed complex, multi-year work with Idaho Department on Environmental Quality to facilitate EPA's approval of the State of Idaho to take on Clean Water Act wastewater permitting authority and allow Idaho to build environmental infrastructure needed for the growing economy.

**"I appreciate all the people who have worked hard for several years to get us to this point. And I'm grateful to the Trump Administration for moving forward so efficiently on this decision. Idaho citizens are usually best served by other Idahoans, and I'm pleased to have the State of Idaho assume administration of this important program for protecting and improving the quality of Idaho's water."**
**– Governor C.L. "Butch" Otter (ID)**

Idaho's system will ensure dischargers protect water quality and meet the state's water quality standards. Idaho joined 46 other states across the country running their own water discharge permitting program, protecting their most precious natural resource: safe, clean water.

Construction underway at the WIFIA funded Georgetown Wet Weather Treatment Station in King County, Washington

Acting Administrator Wheeler and EPA Pacific Northwest Regional Administrator Chris Hladick meet with Western Washington tribal leaders from the Makah Tribe, the Stillaguamish Tribe, and the Lower Elwha Klallam Tribe, as well as leadership of the Northwest Indian Fisheries Commission


UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY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